```
=> fil capl
FILE 'CAPLUS' ENTERED AT 14:58:07 ON 31 DEC 2001
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FILE COVERS 1907 - 31 Dec 2001  VOL 136 ISS 1
FILE LAST UPDATED: 30 Dec 2001  (20011230/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

  This file supports REG1stRY for direct browsing and searching of
  all substance data from the REGISTRY file.  Enter HELP FIRST for
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CAplus now provides online access to patents and literature
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information and abstracts were added in 2001 for over 3.8
million records from 1907-1966.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
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The CA Lexicon is now available in the Controlled Term (/CT) field.
Enter HELP LEXICON for full details.
```

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```
=> d que l34; d que l38; d que l43; d que l46; d que l47
L7             1 SEA FILE=REGISTRY ABB=ON  "DIHYDROFOLATE REDUCTASE"/CN
L8             1 SEA FILE=REGISTRY ABB=ON  "TETRANITROTETRAZOLIUM BLUE"/CN
L9             1 SEA FILE=REGISTRY ABB=ON  "MAGNESIUM CHLORIDE"/CN
L10            1 SEA FILE=REGISTRY ABB=ON  "SODIUM AZIDE"/CN
L11            1 SEA FILE=REGISTRY ABB=ON  NADP/CN
L12            1 SEA FILE=REGISTRY ABB=ON  "DIHYDROFOLIC ACID"/CN
L13         4912 SEA FILE=CAPLUS ABB=ON  TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#

L14         9498 SEA FILE=CAPLUS ABB=ON  CARBOXYPEPTIDASE#
L15           24 SEA FILE=CAPLUS ABB=ON  TETRAHYDROPTEROIC
L19            1 SEA FILE=REGISTRY ABB=ON  63363-84-8/RN
L25          372 SEA FILE=CAPLUS ABB=ON  L15 OR L19
L26         6299 SEA FILE=CAPLUS ABB=ON  L7 OR (DIHYDROFOLATE OR FOLIC ACID OR
                 TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L27          203 SEA FILE=CAPLUS ABB=ON  TETRANITROTETRAZOLIUM BLUE OR ((TETRA
                 NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM
                 OR TNBT OR L8
L28        24409 SEA FILE=CAPLUS ABB=ON  L9 OR MAGNESIUM CHLORIDE
L29        10213 SEA FILE=CAPLUS ABB=ON  L10 OR SODIUM AZIDE
L30        20656 SEA FILE=CAPLUS ABB=ON  L11 OR NICTOINAMIDE DIPHOSPHATE OR
                 NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE
```

PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE
L31 6667 SEA FILE=CAPLUS ABB=ON L12 OR DIHYDROFOL?
L32 6066 SEA FILE=CAPLUS ABB=ON (L13 OR L14 OR L25 OR L26) AND (L27 OR L28 OR L29 OR L30 OR L31)
L33 9333 SEA FILE=CAPLUS ABB=ON (MICROB? OR BACTERI? OR ANTIBIOTIC?)(W)(SUSCEPT? OR SENSITIV?)
L34 4 SEA FILE=CAPLUS ABB=ON L32 AND L33

L7 1 SEA FILE=REGISTRY ABB=ON "DIHYDROFOLATE REDUCTASE"/CN
L8 1 SEA FILE=REGISTRY ABB=ON "TETRANITROTETRAZOLIUM BLUE"/CN
L9 1 SEA FILE=REGISTRY ABB=ON "MAGNESIUM CHLORIDE"/CN
L10 1 SEA FILE=REGISTRY ABB=ON "SODIUM AZIDE"/CN
L11 1 SEA FILE=REGISTRY ABB=ON NADP/CN
L12 1 SEA FILE=REGISTRY ABB=ON "DIHYDROFOLIC ACID"/CN
L13 4912 SEA FILE=CAPLUS ABB=ON TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#

L14 9498 SEA FILE=CAPLUS ABB=ON CARBOXYPEPTIDASE#
L15 24 SEA FILE=CAPLUS ABB=ON TETRAHYDROPTEROIC
L19 1 SEA FILE=REGISTRY ABB=ON 63363-84-8/RN
L25 372 SEA FILE=CAPLUS ABB=ON L15 OR L19
L26 6299 SEA FILE=CAPLUS ABB=ON L7 OR (DIHYDROFOLATE OR FOLIC ACID OR TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L27 203 SEA FILE=CAPLUS ABB=ON TETRANITROTETRAZOLIUM BLUE OR ((TETRA NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM OR TNBT OR L8
L28 24409 SEA FILE=CAPLUS ABB=ON L9 OR MAGNESIUM CHLORIDE
L29 10213 SEA FILE=CAPLUS ABB=ON L10 OR SODIUM AZIDE
L30 20656 SEA FILE=CAPLUS ABB=ON L11 OR NICTOINAMIDE DIPHOSPHATE OR NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE
L31 6667 SEA FILE=CAPLUS ABB=ON L12 OR DIHYDROFOL?
L35 18019 SEA FILE=CAPLUS ABB=ON (?MICROB? OR BACTERI? OR ANTIBIOTIC?)(2A)(SUSCEPT? OR SENSITIV?)
L36 1219 SEA FILE=CAPLUS ABB=ON L35(L)TEST?/OBI
L38 3 SEA FILE=CAPLUS ABB=ON (L13 OR L14 OR (L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31)) AND L36

L7 1 SEA FILE=REGISTRY ABB=ON "DIHYDROFOLATE REDUCTASE"/CN
L8 1 SEA FILE=REGISTRY ABB=ON "TETRANITROTETRAZOLIUM BLUE"/CN
L9 1 SEA FILE=REGISTRY ABB=ON "MAGNESIUM CHLORIDE"/CN
L10 1 SEA FILE=REGISTRY ABB=ON "SODIUM AZIDE"/CN
L11 1 SEA FILE=REGISTRY ABB=ON NADP/CN
L12 1 SEA FILE=REGISTRY ABB=ON "DIHYDROFOLIC ACID"/CN
L13 4912 SEA FILE=CAPLUS ABB=ON TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#

L14 9498 SEA FILE=CAPLUS ABB=ON CARBOXYPEPTIDASE#
L15 24 SEA FILE=CAPLUS ABB=ON TETRAHYDROPTEROIC
L19 1 SEA FILE=REGISTRY ABB=ON 63363-84-8/RN
L25 372 SEA FILE=CAPLUS ABB=ON L15 OR L19
L26 6299 SEA FILE=CAPLUS ABB=ON L7 OR (DIHYDROFOLATE OR FOLIC ACID OR TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L27 203 SEA FILE=CAPLUS ABB=ON TETRANITROTETRAZOLIUM BLUE OR ((TETRA NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM OR TNBT OR L8
L28 24409 SEA FILE=CAPLUS ABB=ON L9 OR MAGNESIUM CHLORIDE
L29 10213 SEA FILE=CAPLUS ABB=ON L10 OR SODIUM AZIDE
L30 20656 SEA FILE=CAPLUS ABB=ON L11 OR NICTOINAMIDE DIPHOSPHATE OR NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE

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L31        6667 SEA FILE=CAPLUS ABB=ON  L12 OR DIHYDROFOL?
L39        1762 SEA FILE=CAPLUS ABB=ON  ANTIBIOTICS/CT AND 9/SC,SX
L40          35 SEA FILE=CAPLUS ABB=ON  (L13 OR L14 OR (L25 OR L26 OR L27 OR
                L28 OR L29 OR L30 OR L31)) AND L39
L43           9 SEA FILE=CAPLUS ABB=ON  L40 AND 10/SC,SX
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- Section code - Microbiala Biochemistry

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L7            1 SEA FILE=REGISTRY ABB=ON  "DIHYDROFOLATE REDUCTASE"/CN
L8            1 SEA FILE=REGISTRY ABB=ON  "TETRANITROTETRAZOLIUM BLUE"/CN
L9            1 SEA FILE=REGISTRY ABB=ON  "MAGNESIUM CHLORIDE"/CN
L10           1 SEA FILE=REGISTRY ABB=ON  "SODIUM AZIDE"/CN
L11           1 SEA FILE=REGISTRY ABB=ON  NADP/CN
L12           1 SEA FILE=REGISTRY ABB=ON  "DIHYDROFOLIC ACID"/CN
L13        4912 SEA FILE=CAPLUS ABB=ON  TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#

L14        9498 SEA FILE=CAPLUS ABB=ON  CARBOXYPEPTIDASE#
L15          24 SEA FILE=CAPLUS ABB=ON  TETRAHYDROPTEROIC
L19           1 SEA FILE=REGISTRY ABB=ON  63363-84-8/RN
L25         372 SEA FILE=CAPLUS ABB=ON  L15 OR L19
L26        6299 SEA FILE=CAPLUS ABB=ON  L7 OR (DIHYDROFOLATE OR FOLIC ACID OR
                TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L27         203 SEA FILE=CAPLUS ABB=ON  TETRANITROTETRAZOLIUM BLUE OR ((TETRA
                NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM
                OR TNBT OR L8
L28       24409 SEA FILE=CAPLUS ABB=ON  L9 OR MAGNESIUM CHLORIDE
L29       10213 SEA FILE=CAPLUS ABB=ON  L10 OR SODIUM AZIDE
L30       20656 SEA FILE=CAPLUS ABB=ON  L11 OR NICTOINAMIDE DIPHOSPHATE OR
                NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE
                PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE
L31        6667 SEA FILE=CAPLUS ABB=ON  L12 OR DIHYDROFOL?
L39        1762 SEA FILE=CAPLUS ABB=ON  ANTIBIOTICS/CT AND 9/SC,SX
L40          35 SEA FILE=CAPLUS ABB=ON  (L13 OR L14 OR (L25 OR L26 OR L27 OR
                L28 OR L29 OR L30 OR L31)) AND L39
L44         176 SEA FILE=CAPLUS ABB=ON  HISTOCHEM?(L)DYE#/OBI
L46           1 SEA FILE=CAPLUS ABB=ON  L40 AND L44
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- Section Code - Biochemical methods

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L7            1 SEA FILE=REGISTRY ABB=ON  "DIHYDROFOLATE REDUCTASE"/CN
L8            1 SEA FILE=REGISTRY ABB=ON  "TETRANITROTETRAZOLIUM BLUE"/CN
L9            1 SEA FILE=REGISTRY ABB=ON  "MAGNESIUM CHLORIDE"/CN
L10           1 SEA FILE=REGISTRY ABB=ON  "SODIUM AZIDE"/CN
L11           1 SEA FILE=REGISTRY ABB=ON  NADP/CN
L12           1 SEA FILE=REGISTRY ABB=ON  "DIHYDROFOLIC ACID"/CN
L13        4912 SEA FILE=CAPLUS ABB=ON  TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#

L14        9498 SEA FILE=CAPLUS ABB=ON  CARBOXYPEPTIDASE#
L15          24 SEA FILE=CAPLUS ABB=ON  TETRAHYDROPTEROIC
L19           1 SEA FILE=REGISTRY ABB=ON  63363-84-8/RN
L25         372 SEA FILE=CAPLUS ABB=ON  L15 OR L19
L26        6299 SEA FILE=CAPLUS ABB=ON  L7 OR (DIHYDROFOLATE OR FOLIC ACID OR
                TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L27         203 SEA FILE=CAPLUS ABB=ON  TETRANITROTETRAZOLIUM BLUE OR ((TETRA
                NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM
                OR TNBT OR L8
L28       24409 SEA FILE=CAPLUS ABB=ON  L9 OR MAGNESIUM CHLORIDE
L29       10213 SEA FILE=CAPLUS ABB=ON  L10 OR SODIUM AZIDE
L30       20656 SEA FILE=CAPLUS ABB=ON  L11 OR NICTOINAMIDE DIPHOSPHATE OR
                NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE
                PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE
L31        6667 SEA FILE=CAPLUS ABB=ON  L12 OR DIHYDROFOL?
L39        1762 SEA FILE=CAPLUS ABB=ON  ANTIBIOTICS/CT AND 9/SC,SX
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L40          35 SEA FILE=CAPLUS ABB=ON  (L13 OR L14 OR (L25 OR L26 OR L27 OR
                L28 OR L29 OR L30 OR L31)) AND L39
L45       15678 SEA FILE=CAPLUS ABB=ON  DRUG SCREENING+OLD/CT
L47           3 SEA FILE=CAPLUS ABB=ON  L40 AND L45


=> s l34 or l38 or l43 or l46 or l47

L193         17 L34 OR L38 OR L43 OR L46 OR L47

=> fil medl; d que l64; d que l66; s l64 or l66

FILE 'MEDLINE' ENTERED AT 14:58:19 ON 31 DEC 2001

 FILE LAST UPDATED: 26 DEC 2001 (20011226/UP). FILE COVERS 1958 TO DATE.

 On April 22, 2001, MEDLINE was reloaded.  See HELP RLOAD for details.

 MEDLINE now contains IN-PROCESS records.  See HELP CONTENT for details.

 MEDLINE is now updated 4 times per week.  A new current-awareness alert
 frequency (EVERYUPDATE) is available.  See HELP UPDATE for more information.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2001 vocabulary.  Enter HELP THESAURUS for details.

 The OLDMEDLINE file segment now contains data from 1958 through 1965.
 Enter HELP CONTENT for details.

 Left, right, and simultaneous left and right truncation are available in the
 Basic Index.  See HELP SFIELDS for details.

 THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
 SUBSTANCE IDENTIFICATION.


L8           1 SEA FILE=REGISTRY ABB=ON  "TETRANITROTETRAZOLIUM BLUE"/CN
L19          1 SEA FILE=REGISTRY ABB=ON  63363-84-8/RN
L52      40768 SEA FILE=MEDLINE ABB=ON  MICROBIAL SENSITIVITY TESTS+NT/CT
L53        703 SEA FILE=MEDLINE ABB=ON  PEPTIDYLTRANSFERASE/CT
L54       6175 SEA FILE=MEDLINE ABB=ON  CARBOXYPEPTIDASES+NT/CT
L55          0 SEA FILE=MEDLINE ABB=ON  L19
L56          5 SEA FILE=MEDLINE ABB=ON  TETRAHYDROPTEROIC
L57       4087 SEA FILE=MEDLINE ABB=ON  TETRAHYDROFOLATE DEHYDROGENASE/CT
L58         71 SEA FILE=MEDLINE ABB=ON  TETRANITROTETRAZOLIUM BLUE OR ((TETRA
                NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM
                OR TNBT OR L8
L59       1819 SEA FILE=MEDLINE ABB=ON  MAGNESIUM CHLORIDE/CT
L60       1100 SEA FILE=MEDLINE ABB=ON  SODIUM AZIDE/CT
L61      14120 SEA FILE=MEDLINE ABB=ON  NADP/CT
L64          1 SEA FILE=MEDLINE ABB=ON  L52 AND (L53 OR L54 OR L55 OR L56 OR
                L57) AND (L58 OR L59 OR L60 OR L61)



L8           1 SEA FILE=REGISTRY ABB=ON  "TETRANITROTETRAZOLIUM BLUE"/CN
L12          1 SEA FILE=REGISTRY ABB=ON  "DIHYDROFOLIC ACID"/CN
L19          1 SEA FILE=REGISTRY ABB=ON  63363-84-8/RN
L52      40768 SEA FILE=MEDLINE ABB=ON  MICROBIAL SENSITIVITY TESTS+NT/CT
L53        703 SEA FILE=MEDLINE ABB=ON  PEPTIDYLTRANSFERASE/CT
L54       6175 SEA FILE=MEDLINE ABB=ON  CARBOXYPEPTIDASES+NT/CT
L55          0 SEA FILE=MEDLINE ABB=ON  L19
L56          5 SEA FILE=MEDLINE ABB=ON  TETRAHYDROPTEROIC
```

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L57        4087 SEA FILE=MEDLINE ABB=ON  TETRAHYDROFOLATE DEHYDROGENASE/CT
L58          71 SEA FILE=MEDLINE ABB=ON  TETRANITROTETRAZOLIUM BLUE OR ((TETRA
                NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM
                OR TNBT OR L8
L59        1819 SEA FILE=MEDLINE ABB=ON  MAGNESIUM CHLORIDE/CT
L60        1100 SEA FILE=MEDLINE ABB=ON  SODIUM AZIDE/CT
L61       14120 SEA FILE=MEDLINE ABB=ON  NADP/CT
L62        4072 SEA FILE=MEDLINE ABB=ON  L12 OR DIHYDROFOL?
L65        2739 SEA FILE=MEDLINE ABB=ON  L52(L)MT/CT  -Subheading MT- methods
L66          15 SEA FILE=MEDLINE ABB=ON  L65 AND (L53 OR L54 OR L55 OR L56 OR
                L57 OR L58 OR L59 OR L60 OR L61 OR L62)


L194         16 L64 OR L66

=> fil wpids; d que l78; d que l81; s l78 or l81

FILE 'WPIDS' ENTERED AT 14:58:22 ON 31 DEC 2001
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FILE LAST UPDATED: 27 DEC 2001              <20011227/UP>
MOST RECENT DERWENT UPDATE            200176   <200176/DW>
DERWENT WORLD PATENTS INDEX-SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> SDI'S MAY BE RUN ON EVERY UPDATE OR MONTHLY AS OF JUNE 2001.
    (EVERY UPDATE IS THE DEFAULT). FOR PRICING INFORMATION
    SEE HELP COST <<<

>>> FOR UP-TO-DATE INFORMATION ABOUT THE DERWENT CHEMISTRY
    RESOURCE, PLEASE VISIT
         http://www.derwent.com/chemistryresource/index.html <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,
    SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<<


L67         151 SEA FILE=WPIDS ABB=ON  TRANSPEPTIDASE# OR TRANS PEPTIDASE# OR
                PEPTIDYLTRANSFERASE# OR PEPTIDYL TRANSFERASE#
L68         429 SEA FILE=WPIDS ABB=ON  CARBOXYPEPTIDASE# OR CARBOXY PEPTIDASE#

L69           0 SEA FILE=WPIDS ABB=ON  TETRAHYDROPTEROIC OR (TETRA HYDRO OR
                TETRAHYDRO)(W)PTEROIC OR TETRA HYDRO PTEROIC
L70         296 SEA FILE=WPIDS ABB=ON  (DIHYDROFOLATE OR TETRAHYDROFOLATE OR
                FOLIC ACID OR (TETRA HYDRO OR TETRAHYDRO OR DIHYDRO OR DI
                HYDRO)(W)FOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L71           6 SEA FILE=WPIDS ABB=ON  (TETRANITROBLUE OR (TETRANITRO OR TETRA
                NITRO)(W)BLUE)(W)TETRAZOLIUM OR TNBT OR (TETRA NITRO OR
                TETRANITRO)(W)(TETRAZOLIUM) OR TETRANITROTETRAZOLIUM(W) BLUE
L72        3799 SEA FILE=WPIDS ABB=ON  MAGNESIUM CHLORIDE
L73         735 SEA FILE=WPIDS ABB=ON  SODIUM AZIDE
L74         579 SEA FILE=WPIDS ABB=ON  NICOTINAMIDE DIPHOSPHATE OR NADP OR
                COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE OR
                (TRIPHOSPHOPYRIDINE OR (TRIPHOSPHO OR TRI PHOSPHO)(W)PYRIDINE)(
                W)NUCLEOTIDE
L77           6 SEA FILE=WPIDS ABB=ON  (L67 OR L68 OR L69 OR L70) AND (L71 OR
                L72 OR L73 OR L74)
L78           4 SEA FILE=WPIDS ABB=ON  L77 AND (ASSAY? OR DETERMIN? OR
                DETECT?)/TI


L67         151 SEA FILE=WPIDS ABB=ON  TRANSPEPTIDASE# OR TRANS PEPTIDASE# OR
```

PEPTIDYLTRANSFERASE# OR PEPTIDYL TRANSFERASE#
L68 429 SEA FILE=WPIDS ABB=ON CARBOXYPEPTIDASE# OR CARBOXY PEPTIDASE#

L69 0 SEA FILE=WPIDS ABB=ON TETRAHYDROPTEROIC OR (TETRA HYDRO OR TETRAHYDRO)(W)PTEROIC OR TETRA HYDRO PTEROIC
L70 296 SEA FILE=WPIDS ABB=ON (DIHYDROFOLATE OR TETRAHYDROFOLATE OR FOLIC ACID OR (TETRA HYDRO OR TETRAHYDRO OR DIHYDRO OR DI HYDRO)(W)FOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L71 6 SEA FILE=WPIDS ABB=ON (TETRANITROBLUE OR (TETRANITRO OR TETRA NITRO)(W)BLUE)(W)TETRAZOLIUM OR TNBT OR (TETRA NITRO OR TETRANITRO)(W)(TETRAZOLIUM) OR TETRANITROTETRAZOLIUM(W) BLUE
L72 3799 SEA FILE=WPIDS ABB=ON MAGNESIUM CHLORIDE
L73 735 SEA FILE=WPIDS ABB=ON SODIUM AZIDE
L74 579 SEA FILE=WPIDS ABB=ON NICOTINAMIDE DIPHOSPHATE OR NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE OR (TRIPHOSPHOPYRIDINE OR (TRIPHOSPHO OR TRI PHOSPHO)(W)PYRIDINE)(W)NUCLEOTIDE
L75 4 SEA FILE=WPIDS ABB=ON HISTOCHEM?(3A)DYE#
L76 1349 SEA FILE=WPIDS ABB=ON (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?)(2A)(SUSCEPT? OR SENSITIV? OR SCREEN?)
L80 7 SEA FILE=WPIDS ABB=ON L76 AND (L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75)
L81 2 SEA FILE=WPIDS ABB=ON L80 AND TESTING/TI

L195 6 L78 OR L81

=> fil biosis; d que 199; d que l100; d que l110; d que l114

FILE 'BIOSIS' ENTERED AT 14:58:26 ON 31 DEC 2001
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FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 28 December 2001 (20011228/ED)

The BIOSIS file has been reloaded. Enter HELP RLOAD and HELP REINDEXING for details.

L7 1 SEA FILE=REGISTRY ABB=ON "DIHYDROFOLATE REDUCTASE"/CN
L8 1 SEA FILE=REGISTRY ABB=ON "TETRANITROTETRAZOLIUM BLUE"/CN
L9 1 SEA FILE=REGISTRY ABB=ON "MAGNESIUM CHLORIDE"/CN
L10 1 SEA FILE=REGISTRY ABB=ON "SODIUM AZIDE"/CN
L11 1 SEA FILE=REGISTRY ABB=ON NADP/CN
L15 24 SEA FILE=CAPLUS ABB=ON TETRAHYDROPTEROIC
L19 1 SEA FILE=REGISTRY ABB=ON 63363-84-8/RN
L87 4794 SEA FILE=BIOSIS ABB=ON TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#

L88 5457 SEA FILE=BIOSIS ABB=ON CARBOXYPEPTIDASE#
L89 291 SEA FILE=BIOSIS ABB=ON L15 OR L19
L90 5808 SEA FILE=BIOSIS ABB=ON L7 OR (DIHYDROFOLATE OR FOLIC ACID OR TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L91 80 SEA FILE=BIOSIS ABB=ON TETRANITROTETRAZOLIUM BLUE OR ((TETRA NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM OR TNBT OR L8
L92 2551 SEA FILE=BIOSIS ABB=ON L9 OR MAGNESIUM CHLORIDE
L93 3714 SEA FILE=BIOSIS ABB=ON L10 OR SODIUM AZIDE
L94 12467 SEA FILE=BIOSIS ABB=ON L11 OR NICTOINAMIDE DIPHOSPHATE OR NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE

PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE
L95 85 SEA FILE=BIOSIS ABB=ON DIHYDROFOLIC ACID
L96 15946 SEA FILE=BIOSIS ABB=ON (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?)(2A)(SUSCEPT? OR SENSITIV?)
L98 237 SEA FILE=BIOSIS ABB=ON (L87 OR L88 OR L89 OR L90) AND (L91 OR L92 OR L93 OR L94 OR L95)
L99 0 SEA FILE=BIOSIS ABB=ON L96 AND L98

L96 15946 SEA FILE=BIOSIS ABB=ON (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?)(2A)(SUSCEPT? OR SENSITIV?)
L97 84 SEA FILE=BIOSIS ABB=ON HISTOCHEM?(3A)DYE#
L100 0 SEA FILE=BIOSIS ABB=ON L96 AND L97

L7 1 SEA FILE=REGISTRY ABB=ON "DIHYDROFOLATE REDUCTASE"/CN
L8 1 SEA FILE=REGISTRY ABB=ON "TETRANITROTETRAZOLIUM BLUE"/CN
L9 1 SEA FILE=REGISTRY ABB=ON "MAGNESIUM CHLORIDE"/CN
L10 1 SEA FILE=REGISTRY ABB=ON "SODIUM AZIDE"/CN
L11 1 SEA FILE=REGISTRY ABB=ON NADP/CN
L15 24 SEA FILE=CAPLUS ABB=ON TETRAHYDROPTEROIC
L19 1 SEA FILE=REGISTRY ABB=ON 63363-84-8/RN
L87 4794 SEA FILE=BIOSIS ABB=ON TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#
L88 5457 SEA FILE=BIOSIS ABB=ON CARBOXYPEPTIDASE#
L89 291 SEA FILE=BIOSIS ABB=ON L15 OR L19
L90 5808 SEA FILE=BIOSIS ABB=ON L7 OR (DIHYDROFOLATE OR FOLIC ACID OR TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L91 80 SEA FILE=BIOSIS ABB=ON TETRANITROTETRAZOLIUM BLUE OR ((TETRA NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM OR TNBT OR L8
L92 2551 SEA FILE=BIOSIS ABB=ON L9 OR MAGNESIUM CHLORIDE
L93 3714 SEA FILE=BIOSIS ABB=ON L10 OR SODIUM AZIDE
L94 12467 SEA FILE=BIOSIS ABB=ON L11 OR NICTOINAMIDE DIPHOSPHATE OR NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE
L95 85 SEA FILE=BIOSIS ABB=ON DIHYDROFOLIC ACID
L96 15946 SEA FILE=BIOSIS ABB=ON (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?)(2A)(SUSCEPT? OR SENSITIV?)
L106 492113 SEA FILE=BIOSIS ABB=ON (TEST? OR ?ASSAY? OR SCREEN?)/TI,ST
L109 2107 SEA FILE=BIOSIS ABB=ON L96(L)L106
L110 1 SEA FILE=BIOSIS ABB=ON L109 AND (L87 OR L88 OR L89 OR L90 OR L91 OR L92 OR L93 OR L94 OR L95)

L7 1 SEA FILE=REGISTRY ABB=ON "DIHYDROFOLATE REDUCTASE"/CN
L8 1 SEA FILE=REGISTRY ABB=ON "TETRANITROTETRAZOLIUM BLUE"/CN
L9 1 SEA FILE=REGISTRY ABB=ON "MAGNESIUM CHLORIDE"/CN
L10 1 SEA FILE=REGISTRY ABB=ON "SODIUM AZIDE"/CN
L11 1 SEA FILE=REGISTRY ABB=ON NADP/CN
L15 24 SEA FILE=CAPLUS ABB=ON TETRAHYDROPTEROIC
L19 1 SEA FILE=REGISTRY ABB=ON 63363-84-8/RN
L87 4794 SEA FILE=BIOSIS ABB=ON TRANSPEPTIDASE# OR PEPTIDYLTRANSFERASE#
L88 5457 SEA FILE=BIOSIS ABB=ON CARBOXYPEPTIDASE#
L89 291 SEA FILE=BIOSIS ABB=ON L15 OR L19
L90 5808 SEA FILE=BIOSIS ABB=ON L7 OR (DIHYDROFOLATE OR FOLIC ACID OR TETRAHYDROFOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L91 80 SEA FILE=BIOSIS ABB=ON TETRANITROTETRAZOLIUM BLUE OR ((TETRA NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM

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                OR TNBT OR L8
L92          2551 SEA FILE=BIOSIS ABB=ON  L9 OR MAGNESIUM CHLORIDE
L93          3714 SEA FILE=BIOSIS ABB=ON  L10 OR SODIUM AZIDE
L94         12467 SEA FILE=BIOSIS ABB=ON  L11 OR NICTOINAMIDE DIPHOSPHATE OR
                  NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE
                  PHOSPHATE OR TRIPHOSPHOPYRIDINE NUCLEOTIDE
L95            85 SEA FILE=BIOSIS ABB=ON  DIHYDROFOLIC ACID
L96         15946 SEA FILE=BIOSIS ABB=ON  (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?)(2
                  A)(SUSCEPT? OR SENSITIV?)
L104      1505417 SEA FILE=BIOSIS ABB=ON  TEST? OR ?ASSAY? OR SCREEN?
L113       116065 SEA FILE=BIOSIS ABB=ON  L104(2A)METHOD#
L114            1 SEA FILE=BIOSIS ABB=ON  L113 AND L96 AND (L87 OR L88 OR L89 OR
                  L90 OR L91 OR L92 OR L93 OR L94 OR L95)


=> s l110 or l114

L196            2 L110 OR L114

=> fil biotechno; d que l134; d que l135; d que l137; d que l142

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FILE LAST UPDATED: 27 DEC 2001      <20011227/UP>
FILE COVERS 1980 TO DATE.

>>>  SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN
     /CT AND BASIC INDEX  <<<


L115         4705 SEA FILE=BIOTECHNO ABB=ON  (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?
                  )(2A)(SUSCEPT? OR SENSITIV?)
L117         2789 SEA FILE=BIOTECHNO ABB=ON  ANTIBIOTIC SENSITIVITY/CT
L118          985 SEA FILE=BIOTECHNO ABB=ON  TRANSPEPTIDASE# OR TRANS PEPTIDASE#
                  OR PEPTIDYLTRANSFERASE# OR PEPTIDYL TRANSFERASE#
L119         4611 SEA FILE=BIOTECHNO ABB=ON  CARBOXYPEPTIDASE# OR CARBOXY
                  PEPTIDASE#
L120            0 SEA FILE=BIOTECHNO ABB=ON  TETRAHYDROPTEROIC OR (TETRA HYDRO
                  OR TETRAHYDRO)(W)PTEROIC OR TETRA HYDRO PTEROIC
L121         2077 SEA FILE=BIOTECHNO ABB=ON  (DIHYDROFOLATE OR TETRAHYDROFOLATE
                  OR FOLIC ACID OR (TETRA HYDRO OR TETRAHYDRO OR DIHYDRO OR DI
                  HYDRO)(W)FOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L122            2 SEA FILE=BIOTECHNO ABB=ON  (TETRANITROBLUE OR (TETRANITRO OR
                  TETRA NITRO)(W)BLUE)(W)TETRAZOLIUM OR TNBT OR (TETRA NITRO OR
                  TETRANITRO)(W)(TETRAZOLIUM) OR TETRANITROTETRAZOLIUM(W) BLUE
L123          591 SEA FILE=BIOTECHNO ABB=ON  MAGNESIUM CHLORIDE
L124          938 SEA FILE=BIOTECHNO ABB=ON  SODIUM AZIDE
L125         5864 SEA FILE=BIOTECHNO ABB=ON  NICOTINAMIDE DIPHOSPHATE OR NADP OR
                  COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE OR
                  (TRIPHOSPHOPYRIDINE OR (TRIPHOSPHO OR TRI PHOSPHO)(W)PYRIDINE)(
                  W)NUCLEOTIDE
L126           82 SEA FILE=BIOTECHNO ABB=ON  DIHYDROFOLIC ACID
L127          145 SEA FILE=BIOTECHNO ABB=ON  (L118 OR L119 OR L120 OR L121) AND
                  (L122 OR L123 OR L124 OR L125 OR L126)
L134            0 SEA FILE=BIOTECHNO ABB=ON  L127 AND (L115 OR L117)


L115         4705 SEA FILE=BIOTECHNO ABB=ON  (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?
                  )(2A)(SUSCEPT? OR SENSITIV?)
L117         2789 SEA FILE=BIOTECHNO ABB=ON  ANTIBIOTIC SENSITIVITY/CT
L118          985 SEA FILE=BIOTECHNO ABB=ON  TRANSPEPTIDASE# OR TRANS PEPTIDASE#
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OR PEPTIDYLTRANSFERASE# OR PEPTIDYL TRANSFERASE#
L119 4611 SEA FILE=BIOTECHNO ABB=ON CARBOXYPEPTIDASE# OR CARBOXY PEPTIDASE#
L120 0 SEA FILE=BIOTECHNO ABB=ON TETRAHYDROPTEROIC OR (TETRA HYDRO OR TETRAHYDRO)(W)PTEROIC OR TETRA HYDRO PTEROIC
L121 2077 SEA FILE=BIOTECHNO ABB=ON (DIHYDROFOLATE OR TETRAHYDROFOLATE OR FOLIC ACID OR (TETRA HYDRO OR TETRAHYDRO OR DIHYDRO OR DI HYDRO)(W)FOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L129 9 SEA FILE=BIOTECHNO ABB=ON HISTOCHEM?(3A)DYE#
L130 1686 SEA FILE=BIOTECHNO ABB=ON CHROMOGEN?
L135 0 SEA FILE=BIOTECHNO ABB=ON (L115 OR L117) AND (L118 OR L119 OR L120 OR L121) AND (L129 OR L130)

L115 4705 SEA FILE=BIOTECHNO ABB=ON (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?)(2A)(SUSCEPT? OR SENSITIV?)
L116 717 SEA FILE=BIOTECHNO ABB=ON L115(3A)(TEST? OR METHOD? OR ?ASSAY?)
L117 2789 SEA FILE=BIOTECHNO ABB=ON ANTIBIOTIC SENSITIVITY/CT
L118 985 SEA FILE=BIOTECHNO ABB=ON TRANSPEPTIDASE# OR TRANS PEPTIDASE# OR PEPTIDYLTRANSFERASE# OR PEPTIDYL TRANSFERASE#
L119 4611 SEA FILE=BIOTECHNO ABB=ON CARBOXYPEPTIDASE# OR CARBOXY PEPTIDASE#
L120 0 SEA FILE=BIOTECHNO ABB=ON TETRAHYDROPTEROIC OR (TETRA HYDRO OR TETRAHYDRO)(W)PTEROIC OR TETRA HYDRO PTEROIC
L121 2077 SEA FILE=BIOTECHNO ABB=ON (DIHYDROFOLATE OR TETRAHYDROFOLATE OR FOLIC ACID OR (TETRA HYDRO OR TETRAHYDRO OR DIHYDRO OR DI HYDRO)(W)FOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L132 29 SEA FILE=BIOTECHNO ABB=ON (L116 OR L117) AND (L118 OR L119 OR L120 OR L121)
L136 1803 SEA FILE=BIOTECHNO ABB=ON SCREENING TEST/CT
L137 1 SEA FILE=BIOTECHNO ABB=ON L132 AND L136

L115 4705 SEA FILE=BIOTECHNO ABB=ON (ANTIBIOTIC OR ?MICROB? OR ?BACTERI?)(2A)(SUSCEPT? OR SENSITIV?)
L117 2789 SEA FILE=BIOTECHNO ABB=ON ANTIBIOTIC SENSITIVITY/CT
L118 985 SEA FILE=BIOTECHNO ABB=ON TRANSPEPTIDASE# OR TRANS PEPTIDASE# OR PEPTIDYLTRANSFERASE# OR PEPTIDYL TRANSFERASE#
L119 4611 SEA FILE=BIOTECHNO ABB=ON CARBOXYPEPTIDASE# OR CARBOXY PEPTIDASE#
L120 0 SEA FILE=BIOTECHNO ABB=ON TETRAHYDROPTEROIC OR (TETRA HYDRO OR TETRAHYDRO)(W)PTEROIC OR TETRA HYDRO PTEROIC
L121 2077 SEA FILE=BIOTECHNO ABB=ON (DIHYDROFOLATE OR TETRAHYDROFOLATE OR FOLIC ACID OR (TETRA HYDRO OR TETRAHYDRO OR DIHYDRO OR DI HYDRO)(W)FOLATE)(W)(REDUCTASE# OR DEHYDROGENASE#)
L122 2 SEA FILE=BIOTECHNO ABB=ON (TETRANITROBLUE OR (TETRANITRO OR TETRA NITRO)(W)BLUE)(W)TETRAZOLIUM OR TNBT OR (TETRA NITRO OR TETRANITRO)(W)(TETRAZOLIUM) OR TETRANITROTETRAZOLIUM(W) BLUE
L123 591 SEA FILE=BIOTECHNO ABB=ON MAGNESIUM CHLORIDE
L124 938 SEA FILE=BIOTECHNO ABB=ON SODIUM AZIDE
L125 5864 SEA FILE=BIOTECHNO ABB=ON NICOTINAMIDE DIPHOSPHATE OR NADP OR COENZYME II OR NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE OR (TRIPHOSPHOPYRIDINE OR (TRIPHOSPHO OR TRI PHOSPHO)(W)PYRIDINE)(W)NUCLEOTIDE
L126 82 SEA FILE=BIOTECHNO ABB=ON DIHYDROFOLIC ACID
L129 9 SEA FILE=BIOTECHNO ABB=ON HISTOCHEM?(3A)DYE#
L130 1686 SEA FILE=BIOTECHNO ABB=ON CHROMOGEN?
L136 1803 SEA FILE=BIOTECHNO ABB=ON SCREENING TEST/CT
L138 28 SEA FILE=BIOTECHNO ABB=ON (L115 OR L117) AND L136
L140 6 SEA FILE=BIOTECHNO ABB=ON ((L118 OR L119 OR L120 OR L121 OR

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                L122 OR L123 OR L124 OR L125 OR L126) OR L129 OR L130 OR
                ENZYM?) AND L138
L141       52665 SEA FILE=BIOTECHNO ABB=ON  ENZYME LINKED
L142           3 SEA FILE=BIOTECHNO ABB=ON  L140 NOT L141


=> s l137 or l142

L197           3 L137 OR L142

=> fil embase

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 FILE COVERS 1974 TO 28 Dec 2001 (20011228/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l163; d que l170; d que l192; s l163 or l170 or l192

L8             1 SEA FILE=REGISTRY ABB=ON  "TETRANITROTETRAZOLIUM BLUE"/CN
L15           24 SEA FILE=CAPLUS ABB=ON  TETRAHYDROPTEROIC
L19            1 SEA FILE=REGISTRY ABB=ON  63363-84-8/RN
L143         403 SEA FILE=EMBASE ABB=ON  PEPTIDYLTRANSFERASE/CT
L144        1016 SEA FILE=EMBASE ABB=ON  CARBOXYPEPTIDASE/CT
L145         232 SEA FILE=EMBASE ABB=ON  L15 OR L19
L146         227 SEA FILE=EMBASE ABB=ON  FOLYLPOLYGLUTAMATE SYNTHASE/CT
L147        3070 SEA FILE=EMBASE ABB=ON  DIHYDROFOLATE REDUCTASE/CT
L148           1 SEA FILE=EMBASE ABB=ON  TETRANITROBLUETETRAZOLIUM/BI
L149          40 SEA FILE=EMBASE ABB=ON  TETRANITROTETRAZOLIUM BLUE OR ((TETRA
                NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM
                OR TNBT OR L8
L150         580 SEA FILE=EMBASE ABB=ON  NITROBLUE TETRAZOLIUM/CT
L151        2602 SEA FILE=EMBASE ABB=ON  MAGNESIUM CHLORIDE/CT
L152        1810 SEA FILE=EMBASE ABB=ON  SODIUM AZIDE/CT
L153        2402 SEA FILE=EMBASE ABB=ON  NICOTINAMIDE ADENINE DINUCLEOTIDE
                PHOSPHATE/CT
L154         231 SEA FILE=EMBASE ABB=ON  DIHYDROFOLIC ACID/CT
L155        1451 SEA FILE=EMBASE ABB=ON  MICROBIOLOGICAL EXAMINATION/CT
L156          46 SEA FILE=EMBASE ABB=ON  SENSITIVITY TESTING/CT
L157       34624 SEA FILE=EMBASE ABB=ON  DRUG SENSITIVITY/CT
L161         170 SEA FILE=EMBASE ABB=ON  (L143 OR L144 OR L145 OR L146 OR L147)
                AND (L148 OR L149 OR L150 OR L151 OR L152 OR L153 OR L154)
L163           1 SEA FILE=EMBASE ABB=ON  L161 AND (L155 OR L156 OR L157) AND
                TRIMETHOPRIM/CT



L8             1 SEA FILE=REGISTRY ABB=ON  "TETRANITROTETRAZOLIUM BLUE"/CN
L15           24 SEA FILE=CAPLUS ABB=ON  TETRAHYDROPTEROIC
L19            1 SEA FILE=REGISTRY ABB=ON  63363-84-8/RN
L143         403 SEA FILE=EMBASE ABB=ON  PEPTIDYLTRANSFERASE/CT
L144        1016 SEA FILE=EMBASE ABB=ON  CARBOXYPEPTIDASE/CT
L145         232 SEA FILE=EMBASE ABB=ON  L15 OR L19
L146         227 SEA FILE=EMBASE ABB=ON  FOLYLPOLYGLUTAMATE SYNTHASE/CT
L147        3070 SEA FILE=EMBASE ABB=ON  DIHYDROFOLATE REDUCTASE/CT
L148           1 SEA FILE=EMBASE ABB=ON  TETRANITROBLUETETRAZOLIUM/BI
L149          40 SEA FILE=EMBASE ABB=ON  TETRANITROTETRAZOLIUM BLUE OR ((TETRA
                NITRO OR TETRANITRO)(W)BLUE OR TETRANITROBLUE)(W)TETRAZOLIUM
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ANSWERS '17-19' FROM FILE BIOTECHNO
ANSWERS '20-36' FROM FILE CAPLUS
ANSWERS '37-38' FROM FILE BIOSIS
ANSWERS '39-47' FROM FILE EMBASE
ANSWERS '48-53' FROM FILE WPIDS

=> d ibib ab hitrn 1-53; fil hom

L199 ANSWER 1 OF 53 MEDLINE
ACCESSION NUMBER: 2001199937 MEDLINE
DOCUMENT NUMBER: 21183158 PubMed ID: 11289523
TITLE: Susceptibility to fluconazole of Candida clinical isolates determined by FUN-1 staining with flow cytometry and epifluorescence microscopy.
AUTHOR: Pina-Vaz C; Sansonetty F; Rodrigues A G; Costa-de-Oliveira S; Martinez-de-Oliveira J; Fonseca A F
CORPORATE SOURCE: Department of Microbiology, Porto School of Medicine, University of Porto, Portugal.. micfam@ip.pt
SOURCE: JOURNAL OF MEDICAL MICROBIOLOGY, (2001 Apr) 50 (4) 375-82. Journal code: J2N; 0224131. ISSN: 0022-2615.
PUB. COUNTRY: England: United Kingdom
(EVALUATION STUDIES)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200104
ENTRY DATE: Entered STN: 20010425
Last Updated on STN: 20010425
Entered Medline: 20010419

AB The susceptibility of clinical Candida isolates to fluconazole was assayed by flow cytometry (FCM) and epifluorescence microscopy (EFM), with FUN-1 staining. In all, 25 clinical isolates of Candida spp. (12 sensitive, 3 dose-dependently sensitive and 10 resistant to fluconazole according to the NCCLS M27-A protocol) were treated with increasing concentrations of fluconazole during 1 or 2 h staining with FUN-1 for 30 min and analysed, respectively, by FCM at 575 nm (FL2) and by EFM. Fluconazole-susceptible strains showed an increased accumulation of FUN-1 in comparison with controls as determined by FCM and a reduced metabolic processing of the probe, confirmed by EFM. Conversely, resistant strains showed decreased FUN-1 staining and were able to process the probe. The fluconazole minimal inhibitory concentrations (MICs) determined by FCM or EFM after FUN-1 staining compared very well with the corresponding values determined by the M27-A protocol, indicating that FUN-1 staining can be used as an alternative to the conventional method. MIC values of resistant strains, with the exception of C. krusei, were lower when treatment with fluconazole followed pre-incubation with 0.1 mM sodium azide, a concentration known to inhibit the activity of efflux pumps. These results show that FUN-1 staining can be used as an alternative and rapid method for the assessment of susceptibility of Candida clinical isolates to fluconazole. Furthermore, the results suggest that resistance of Candida cells to fluconazole, with the exception of C. krusei strains, is likely to be due to the activity of efflux pumps.

L199 ANSWER 2 OF 53 MEDLINE
ACCESSION NUMBER: 2001272853 MEDLINE
DOCUMENT NUMBER: 21260853 PubMed ID: 11367555
TITLE: [Choice of the NaCl concentration for optimizing the detection of methicillin resistance in Staphylococcus using the gel diffusion method].
Choix de la concentration en NaCl pour optimiser la detection de la resistance a la meticilline chez staphylococcus par la methode de diffusion en gelose.
AUTHOR: Bemer-Melchior P; Drugeon H B

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                OR TNBT OR L8
L150        580 SEA FILE=EMBASE ABB=ON  NITROBLUE TETRAZOLIUM/CT
L151       2602 SEA FILE=EMBASE ABB=ON  MAGNESIUM CHLORIDE/CT
L152       1810 SEA FILE=EMBASE ABB=ON  SODIUM AZIDE/CT
L153       2402 SEA FILE=EMBASE ABB=ON  NICOTINAMIDE ADENINE DINUCLEOTIDE
                PHOSPHATE/CT
L154        231 SEA FILE=EMBASE ABB=ON  DIHYDROFOLIC ACID/CT
L158     129835 SEA FILE=EMBASE ABB=ON  ENZYME ACTIVITY/CT
L159       7040 SEA FILE=EMBASE ABB=ON  BACTERIAL ENZYME/CT
L161        170 SEA FILE=EMBASE ABB=ON  (L143 OR L144 OR L145 OR L146 OR L147)
                AND (L148 OR L149 OR L150 OR L151 OR L152 OR L153 OR L154)
L166         19 SEA FILE=EMBASE ABB=ON  L161 AND (L158 OR L159)
L167     290760 SEA FILE=EMBASE ABB=ON  DRUG EFFICACY/CT
L170          2 SEA FILE=EMBASE ABB=ON  L166 AND L167


L158     129835 SEA FILE=EMBASE ABB=ON  ENZYME ACTIVITY/CT
L159       7040 SEA FILE=EMBASE ABB=ON  BACTERIAL ENZYME/CT
L160      67547 SEA FILE=EMBASE ABB=ON  ANTIBIOTIC AGENT/CT
L169      55983 SEA FILE=EMBASE ABB=ON  ENZYME INHIBITION/CT
L172     943263 SEA FILE=EMBASE ABB=ON  METHODOLOGY+NT/CT
L183      18831 SEA FILE=EMBASE ABB=ON  ANTIINFECTIVE AGENT/CT
L184      49075 SEA FILE=EMBASE ABB=ON  TECHNIQUE/CT
L185      16314 SEA FILE=EMBASE ABB=ON  ANTIBIOTIC SENSITIVITY/CT
L189      26674 SEA FILE=EMBASE ABB=ON  MINIMUM INHIBITORY CONCENTRATION/CT
L190       4917 SEA FILE=EMBASE ABB=ON  COLORIMETRY/CT
L191       1320 SEA FILE=EMBASE ABB=ON  (L185 OR L189 OR L190) AND (L158 OR
                L169 OR L159)
L192          7 SEA FILE=EMBASE ABB=ON  (L160 OR L183) AND (L184 OR L172) AND
                L191


L198         10 L163 OR L170 OR L192

=> dup rem l194,l197,l193,l196,l198,l195
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FILE 'WPIDS' ENTERED AT 14:59:39 ON 31 DEC 2001
COPYRIGHT (C) 2001 DERWENT INFORMATION LTD
PROCESSING COMPLETED FOR L194
PROCESSING COMPLETED FOR L197
PROCESSING COMPLETED FOR L193
PROCESSING COMPLETED FOR L196
PROCESSING COMPLETED FOR L198
PROCESSING COMPLETED FOR L195
L199         53 DUP REM L194 L197 L193 L196 L198 L195 (1 DUPLICATE REMOVED)
                ANSWERS '1-16' FROM FILE MEDLINE
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CORPORATE SOURCE: Laboratoire de bacteriologie, hopital Laennec, CHU Nantes, boulevard J. Monod, 44093 Saint-Herblain cedex 1, Nantes, France.. pascale.bemermelchior@chu-nantes.fr
SOURCE: PATHOLOGIE BIOLOGIE, (2001 Apr) 49 (3) 216-21.
Journal code: OSG; 0265365. ISSN: 0369-8114.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010702
Last Updated on STN: 20010702
Entered Medline: 20010628

AB The detection of oxacillin resistance is evaluated by the disk diffusion method in a collection of 374 Staphylococcus sp strains. The disk diffusion assay is performed with 5-microgram oxacillin disk and a 10(8) CFU/mL inoculum on Mueller-Hinton agar plates supplemented with 2 or 5% NaCl and incubated at 37 degrees C for 24 h. Strains are considered resistant in accordance to the French recommendations (any growth around the disk is observed). The detection of mecA gene is performed by PCR almost for resistant and discordant strains. Results are concordant for 246 of 256 Staphylococcus aureus strains (182 susceptible and 64 resistant strains) and for 105 of 118 S. epidermidis isolates tested (37 susceptible and 68 resistant strains). Six mecA-negative strains (3 S. aureus and 3 S. epidermidis) give false resistant results on agar with 2 and 5% NaCl. Seventeen isolates are discordant on 5% NaCl: 7 mecA-negative S. aureus strains are susceptible on 2% NaCl agar but resistant at 5% (3% false-positive results), 10 mecA-positive S. epidermidis strains are resistant on 2% NaCl agar but susceptible at 5% NaCl (5% false-negative results). The detection of meticillin resistance is improved on agar supplemented with 2% NaCl.

L199 ANSWER 3 OF 53 MEDLINE
ACCESSION NUMBER: 2001272851 MEDLINE
DOCUMENT NUMBER: 21260851 PubMed ID: 11367553
TITLE: [Staphylococcus aureus: new detection of intrinsic resistance using the diffusion method].
Staphylococcus aureus: nouvelle detection de la resistance intrinseque par la methode de diffusion.
AUTHOR: Mougeot C; Guillaumat-Tailliet J; Libert J M
CORPORATE SOURCE: Laboratoire de bacteriologie, centre chirurgical Marie-Lannelongue, 133, avenue de la Resistance, 92350 Le Plessis, Robinson, France.
SOURCE: PATHOLOGIE BIOLOGIE, (2001 Apr) 49 (3) 199-204.
Journal code: OSG; 0265365. ISSN: 0369-8114.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010702
Last Updated on STN: 20010702
Entered Medline: 20010628

AB Because of an heterogeneously-expressed resistance among methicillin-resistant Staphylococcus aureus strains the conditions for antibiogram determination had rapidly to be modified so as to improve their detection. The newly recommended conditions (incubation at +30 degrees C or on hypersalted agar medium) remain widely used at the moment, although they appear to be more and more often badly adapted, particularly because of the recently-observed renewed outbreak of wild strains with a weak in vitro phenotypic expression. It is the reason why we searched for a new and more reliable phenotypic method although still accessible for any laboratory. Sixty-five strains of Staphylococcus aureus entered the

study. The absence or presence of mecA gene was previously investigated by gene amplification. These strains were of various origins and had often caused difficulties for the detection of intrinsic resistance to methicillin on the antibiogram. Our results confirm the failures of the classical methods (false negative results at +30 degrees C, false negative or positive results on hypersalted agar medium incubated at +37 degrees C). They also allow to propose a new method which relies on the determination of the susceptibility to cefoxitin using the usual conditions for antibiogram determination. In our series of strains, this new method proved to widely improve both the sensitivity and the susceptibility for the detection of methicillin-resistance by diffusion on the antibiogram.

L199 ANSWER 4 OF 53 MEDLINE
ACCESSION NUMBER: 2001372183 MEDLINE
DOCUMENT NUMBER: 21322515 PubMed ID: 11428876
TITLE: Methods for identifying methicillin resistancein Staphylococcus aureus.
AUTHOR: Smyth R W; Kahlmeter G; Olsson Liljequist B; Hoffman B
CORPORATE SOURCE: Department of Microbiology, Central Hospital, Vaxjo, SE-351 85, Sweden.. robert.smyth@ltkronoberg.se
SOURCE: JOURNAL OF HOSPITAL INFECTION, (2001 Jun) 48 (2) 103-7.
Journal code: ID6; 8007166. ISSN: 0195-6701.
PUB. COUNTRY: England: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200108
ENTRY DATE: Entered STN: 20010827
Last Updated on STN: 20010827
Entered Medline: 20010823

AB Five methods for the detection of methicillin-resistant Staphylococcus aureus were used to examine a collection of 100 clinical isolates comprising both susceptible and resistant strains. The disc diffusion test with oxacillin had a sensitivity of 93.3% and a specificity of 92.0% whereas mannitol salt agar containing oxacillin had a sensitivity of 100% and specificity 80.6% with high inoculum. With a low inoculum the sensitivity was 90.7% and specificity 96.0%. The MRSA screen test (Denka Seiken Co. Ltd., Japan) and Evigene MRSA Detection Kit (State Serum Institute, Denmark) tests were in complete agreement with results obtained with polymerase chain reaction assays amplifying mecA and nuc gene sequences. Copyright 2001 The Hospital Infection Society.

L199 ANSWER 5 OF 53 MEDLINE
ACCESSION NUMBER: 2001359678 MEDLINE
DOCUMENT NUMBER: 21313577 PubMed ID: 11420338
TITLE: Detection of methicillin/oxacillin resistance in staphylococci.
AUTHOR: Brown D F
CORPORATE SOURCE: Public Health and Clinical Microbiology Laboratory, Addenbrooke's Hospital, Hills Road, Cambridge CB2 2QW, UK.. dfjb2@cam.ac.uk
SOURCE: JOURNAL OF ANTIMICROBIAL CHEMOTHERAPY, (2001 Jul) 48 Suppl 1 65-70.
Journal code: HD7; 7513617. ISSN: 0305-7453.
PUB. COUNTRY: England: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200109
ENTRY DATE: Entered STN: 20010924
Last Updated on STN: 20010924
Entered Medline: 20010920

AB Methicillin/oxacillin-resistant staphylococci are heterogeneous in their expression of resistance to beta-lactam agents and the test conditions have a major effect on the expression and therefore the detection of resistance. Conflicting recommendations regarding the most reliable method for routine use are partly related to differences between strains and there may be a variable interaction between the factors affecting the expression of resistance, including the agent tested, the medium, the NaCl concentration, the inoculum, temperature and period of incubation and the reading of endpoints. 'Borderline' resistant strains may have altered PBPs or be penicillinase hyperproducers, and these can be difficult to distinguish from resistant strains that carry the mecA gene. Recommended methods for MIC and disc diffusion testing are described, although it is unlikely that any single method will detect all resistant strains. Some rapid and/or automated methods are also available, including latex agglutination techniques for the detection of PBP2a. The gold standard method for the detection of resistance mediated by mecA is PCR, which is most commonly used as a reference method at present.

L199 ANSWER 6 OF 53 MEDLINE
ACCESSION NUMBER: 2000295124 MEDLINE
DOCUMENT NUMBER: 20295124 PubMed ID: 10835007
TITLE: New chromogenic identification and detection of Staphylococcus aureus and methicillin-resistant S. aureus.
AUTHOR: Merlino J; Leroi M; Bradbury R; Veal D; Harbour C
CORPORATE SOURCE: Department of Microbiology and Infectious Diseases, Concord Repatriation General Hospital, Concord 2139, New South Wales, Australia. john.micr.crg.cs.nsw.gov.au.
SOURCE: JOURNAL OF CLINICAL MICROBIOLOGY, (2000 Jun) 38 (6) 2378-80.
Journal code: HSH; 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200007
ENTRY DATE: Entered STN: 20000810
Last Updated on STN: 20000810
Entered Medline: 20000726

AB This paper describes a new chromogenic plate medium, CHROMagar Staph aureus (CHROMagar, Paris, France), for the identification of Staphylococcus aureus on the basis of colony pigmentation. The abilities of CHROMagar Staph aureus, thermostable nuclease (DNase), and mannitol salt agar (MSA) to identify S. aureus isolates (n = 114) and discriminate between S. aureus and coagulase-negative staphylococci (CoNS; n = 22) were compared. CHROMagar Staph aureus proved to be more sensitive and specific than DNase and MSA, allowing a reliable, simple, and rapid method for the identification of S. aureus isolates. All CoNS encountered in this study with the exception of S. chromogenes could be easily differentiated from S. aureus on this medium. The supplementation with 4 microgram of oxacillin or methicillin per ml allowed simple identification of methicillin resistance in hospital-acquired S. aureus strains which show multiple-drug resistance profiles. Community-acquired methicillin-resistant S. aureus strains showing non-multi-drug resistance profiles require further evaluation on this new chromogenic medium. Methicillin or oxacillin resistance of all S. aureus isolates was confirmed by the detection of penicillin-binding protein 2a, encoded by the mecA gene, using the latex slide agglutination MRSA-Screen test (PBP 2' Test, DR900M; Oxoid).

L199 ANSWER 7 OF 53 MEDLINE
ACCESSION NUMBER: 2001243394 MEDLINE
DOCUMENT NUMBER: 21073781 PubMed ID: 11205643

TITLE: Hospital outbreak of methicillin-resistant Staphylococcus aureus followed by an in vivo change to a mecA-negative mutant with loss of epidemicity.
AUTHOR: Wagenvoort J H; Toenbreker H M; Heck M E; van Leeuwen W J; Wannet W J
CORPORATE SOURCE: Department of Medical Microbiology, Atrium Medical Centre, Heerlen, The Netherlands.. j.wagenvoort@gozl.nl
SOURCE: EUROPEAN JOURNAL OF CLINICAL MICROBIOLOGY AND INFECTIOUS DISEASES, (2000 Dec) 19 (12) 976-7.
Journal code: EM5; 8804297. ISSN: 0934-9723.
PUB. COUNTRY: Germany: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200105
ENTRY DATE: Entered STN: 20010517
Last Updated on STN: 20010517
Entered Medline: 20010510

L199 ANSWER 8 OF 53 MEDLINE
ACCESSION NUMBER: 2000442313 MEDLINE
DOCUMENT NUMBER: 20443671 PubMed ID: 10990264
TITLE: Non-Penicillin-Binding protein mediated high-level penicillin and cephalosporin resistance in a Hungarian clone of Streptococcus pneumoniae.
AUTHOR: Smith A M; Klugman K P
CORPORATE SOURCE: Department of Clinical Microbiology and Infectious Diseases, South African Institute for Medical Research, Johannesburg.. anthonys@mail.saimr.wits.ac.za
SOURCE: MICROBIAL DRUG RESISTANCE, (2000 Summer) 6 (2) 105-10.
Journal code: CRS. ISSN: 1076-6294.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010208

AB A clone of Hungarian pneumococcal strains has recently been isolated with notably high levels of beta-lactam resistance (penicillin MIC, 16 microg/mL; cefotaxime MIC, 4 microg/mL). The role that each penicillin-binding protein (PBP) plays in the development of resistance in these strains was investigated via transformation of susceptible strain R6 with pbp DNA from resistant strain 3191. Transformation of strain R6 with pbp2X DNA resulted in transformants with penicillin and cefotaxime MICs of 0.06 and 0.25 microg/mL, respectively. Further introduction of pbp2B and 1A DNA increased penicillin MICs to 0.25 and 4 microg/mL, respectively. Transformation of strain R6 with a combination of pbp2X and pbp1A DNA produced R63191/2X/1A strains with an unexpected low cefotaxime MIC of 0.5 microg/mL. This low-level of cefotaxime resistance was surprisingly increased from 0.5 to 2 microg/mL in R63191/2X/2B/1A strains. This suggests the involvement of altered PBP 2B in cefotaxime resistance. Therefore, within this particular setting of resistance, the environmental presence of selectors for altered PBP 2B (penicillin or piperacillin) are required for the development of high-level cefotaxime resistance. The MICs of R63191/X/2B/1A strains never reached the MICs of the donor strain. Full MICs of the donor were eventually reached by transforming R63191/2X/2B with chromosomal3191 DNA. Resultant transformants revealed the introduction of altered PBP 1A, while unaltered PBPs 1B, 2A, and 3 proved that these PBPs were not involved in resistance. A non-PBP resistance determinant has therefore made up the difference in resistance between R63191/2X/2B/1A and donor strain 3191. Beta-lactamase activity and efflux

systems have so far been eliminated as causes of resistance. This resistance determinant represents a novel mechanism for beta-lactam resistance in clinical isolates of pneumococci, operates at the highest level of resistance, and remains to be identified.

L199 ANSWER 9 OF 53 MEDLINE
ACCESSION NUMBER: 2000442312 MEDLINE
DOCUMENT NUMBER: 20443670 PubMed ID: 10990263
TITLE: Transfer of penicillin resistance between Neisseriae in microcosm.
AUTHOR: Orus P; Vinas M
CORPORATE SOURCE: Microbiology Unit and Public Health Institute, University of Barcelona, Spain.
SOURCE: MICROBIAL DRUG RESISTANCE, (2000 Summer) 6 (2) 99-104. Journal code: CRS. ISSN: 1076-6294.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010208

AB Horizontal gene transfer between commensal and pathogenic Neisseriae is the mechanism proposed to explain how pathogenic species acquire altered portions of the penA gene, which encodes penicillin binding protein 2. These changes resulted in a moderately penicillin-resistant phenotype in the meningococci, whose frequency of isolation in Spain increased at the end of the 1980s. Little has been published about the possibility of this gene transfer in nature or about its simulation in the laboratory. We designed a simple microcosm, formed by solid and liquid media, that partially mimics the upper human respiratory tract. In this microcosm, penicillin-resistant commensal strains and the fully susceptible meningococcus were co-cultivated. The efficiency of gene transfer between the strains depended on the phase of bacterial growth and the conditions of culture. Resistance of penicillin was acquired in different steps irrespective of the source of the DNA. The presence of DNase in the medium had no effect on gene transfer, but it was near zero when nicked DNA was used. Cell-to-cell contact or membrane blebs could explain these results. The analysis of sequences of the transpeptidase domain of PBP2 from transformants, and from donor and recipient strains demonstrated that the emergence of moderately resistant transformants was due to genetic exchange between the co-cultivated strains. Finally, mechanisms other than penA modification could be invoked to explain decreased susceptibility.

L199 ANSWER 10 OF 53 MEDLINE
ACCESSION NUMBER: 2001095346 MEDLINE
DOCUMENT NUMBER: 20390867 PubMed ID: 10935183
TITLE: Search for newer antileprosy drugs.
AUTHOR: Dhople A M
CORPORATE SOURCE: Department of Biological Sciences, Florida Institute of Technology, Melbourne 32901, USA.
SOURCE: INDIAN JOURNAL OF LEPROSY, (2000 Jan-Mar) 72 (1) 5-20. Journal code: IJL. ISSN: 0254-9395.
PUB. COUNTRY: India
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010201

AB In 1991 World Health Organization proclaimed the goal of global

elimination of leprosy as a public health problem by year 2000 by implementing multidrug therapy (MDT). Since then the prevalence rate has declined by 85%. However, during the same period the incidence rate of leprosy has remained constant or even has been increasing. This suggests that it will take a long time for the eradication of leprosy and that without in-vitro cultivation of M. leprae, eradication of leprosy is not likely to be achieved. While in-vitro cultivation is a long-term goal, as an immediate measure, there is an urgent need for the development of newer drugs and newer multidrug therapy regimens. Using the in-vitro system for screening potential antileprosy drugs and also using the mouse foot-pad system we have evaluated several compounds in four classes of drugs--**dihydrofolate** reductase inhibitors, fluoroquinolones, rifampicin analogues and phenazines--and identified at least two compounds that appear to be more potent than dapsone, rifampicin and clofazimine. Newer combinations of rifampicin analogues and fluoroquinolones have also been identified that seem to be better than the combination of rifampicin and ofloxacin.

L199 ANSWER 11 OF 53 MEDLINE
ACCESSION NUMBER: 2000046174 MEDLINE
DOCUMENT NUMBER: 20046174 PubMed ID: 10610377
TITLE: Further evaluation of the MRSA-Screen kit for rapid detection of methicillin resistance.
COMMENT: Comment on: J Clin Microbiol. 1999 May;37(5):1591-4
AUTHOR: Marriott D J; Karagiannis T; Harkness J L; Kearney P
SOURCE: JOURNAL OF CLINICAL MICROBIOLOGY, (1999 Nov) 37 (11) 3783-4.
Journal code: HSH; 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
Commentary
Letter
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199911
ENTRY DATE: Entered STN: 20000113
Last Updated on STN: 20000209
Entered Medline: 19991130

L199 ANSWER 12 OF 53 MEDLINE
ACCESSION NUMBER: 1999380312 MEDLINE
DOCUMENT NUMBER: 99380312 PubMed ID: 10449481
TITLE: Comparison of susceptibility testing methods with mecA gene analysis for determining oxacillin (methicillin) resistance in clinical isolates of Staphylococcus aureus and coagulase-negative Staphylococcus spp.
AUTHOR: Kohner P; Uhl J; Kolbert C; Persing D; Cockerill F 3rd
CORPORATE SOURCE: Mayo Clinic and Foundation, Rochester, Minnesota 55905, USA.
SOURCE: JOURNAL OF CLINICAL MICROBIOLOGY, (1999 Sep) 37 (9) 2952-61.
Journal code: HSH; 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199909
ENTRY DATE: Entered STN: 19990913
Last Updated on STN: 20010910
Entered Medline: 19990902
AB Ninety-nine clinical staphylococcal isolates (58 coagulase-negative Staphylococcus spp. [CoNS] and 41 Staphylococcus aureus isolates) were evaluated for susceptibility to oxacillin. The following susceptibility testing methods, media, and incubation conditions were studied: agar

dilution by using Mueller-Hinton (MH) medium (Difco) supplemented with either 0, 2, or 4% NaCl and incubation at 30 or 35 degrees C in ambient air for 24 or 48 h; disk diffusion by using commercially prepared MH medium (Difco) and MH II agar (BBL) and incubation at 35 degrees C in ambient air for 24 or 48 h; and agar screen (spot or swab inoculation) by using commercially prepared agar (Remel) or MH agar (Difco) prepared in-house, each containing 4% NaCl and 6 microg of oxacillin/ml (0.6-microg/ml oxacillin was also studied with MH agar prepared in-house for the agar swab method and CoNS isolates) and incubation at 35 degrees C in ambient air for 24 or 48 h for swab inoculation and at 30 or 35 degrees C in ambient air for 24 or 48 h for spot inoculation. The results for these methods were compared to the results for mecA gene detection by a PCR method. Given the ability to support growth and the results for susceptibility testing (the breakpoint for susceptible isolates was </=2 microg/ml), the best methods for CoNS isolates were (i) agar dilution by using MH medium supplemented with 4% NaCl and incubation at 35 degrees C for 48 h (no growth failures were noted, and sensitivity was 97.6%) and (ii) agar screen (swab inoculation) by using MH medium prepared in-house supplemented with 4% NaCl and containing 0.6 microg oxacillin/ml and incubation at 35 degrees C for 48 h (one isolate that did not carry the mecA gene did not grow, and the sensitivity was 100%). All but one (agar dilution without added NaCl and incubation at 30 degrees C for 48 h) of the methods tested revealed all oxacillin-resistant S. aureus isolates, and no growth failures occurred with any method. If the breakpoint for susceptibility was lowered to </=1 microg/ml for agar dilution methods, more CoNS isolates with oxacillin resistance related to the mecA gene were detected when 0 or 2% NaCl agar supplementation was used. Only one CoNS isolate with mecA gene-associated resistance was not detected by using agar dilution and MH medium supplemented with 4% NaCl with incubation for 48 h. When the breakpoint for susceptibility was decreased 10-fold (from 6.0 to 0.6 microg of oxacillin per ml) for the agar swab screen method, fully 100% of the CoNS isolates that carried the mecA gene were identified.

L199 ANSWER 13 OF 53 MEDLINE
ACCESSION NUMBER: 1999346582 MEDLINE
DOCUMENT NUMBER: 99346582 PubMed ID: 10418028
TITLE: [Comparison of different techniques for the detection of heterogeneous resistance to methicillin in Staphylococcus aureus].
Etude comparative de differentes techniques pour la detection de la resistance heterogene a la meticilline chez Staphylococcus aureus.
AUTHOR: May L; Le Turdu F; Dardel P; Bismuth R
CORPORATE SOURCE: Hopital V. Dupouy, Argenteuil, France.
SOURCE: PATHOLOGIE BIOLOGIE, (1999 May) 47 (5) 501-7.
Journal code: OSG; 0265365. ISSN: 0369-8114.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908
ENTRY DATE: Entered STN: 19990910
Last Updated on STN: 20010910
Entered Medline: 19990824

AB The methods for detection of methicillin resistant S. aureus (MRSA) can fail to detect resistance because phenotypic expression is often heterogeneous (40% of strains). Seventy four strains of S. aureus [4 methicillin susceptible strains, 10 homogeneous MRSA (Ro) and 60 heterogeneous MRSA (Rh)] were isolated from different french hospitals in Paris. These strains were tested by different methods: oxacillin screen plate with 6 micrograms/ml oxacillin and 4% NaCl, agar diffusion method with 5 micrograms oxacillin disk tested either at 30 degrees C on

Mueller-Hinton medium or at 37 degrees C on Mueller-Hinton plus 5% NaCl, BBL Crystal MRSA ID system tested with two inocula (0.5 and 1 McFarland equivalent bacterial suspension) at 37 degrees C for 4 h and 5 h. Dot-blot hybridization was performed under stringent condition with the mecA probe. The accuracy of the different methods for the detection of methicillin resistance is equivalent, except for the BBL crystal system with a 0.5 McFarland inoculum wich detects the resistance with an accuracy of 86% for Ro strains and 69% for Rh strains. In other respects, there was a close correlation with the detection of the phenotypic resistance and the presence of mecA gene. So this study demonstrates that these various methods can be used for the detection of methicillin resistant S. aureus. For a rapid detection (below 5 h) the BBL crystal system with a 1 McFarland inoculum can be used; the agar diffusion method remains a good method provided some conditions (inoculum, incubation temperature, addition of salt, incubation period); the oxicillin screnn plate is a very attractive method for it is easy and reliable.

L199 ANSWER 14 OF 53 MEDLINE
ACCESSION NUMBER: 92238685 MEDLINE
DOCUMENT NUMBER: 92238685 PubMed ID: 1810191
TITLE: Comparison of conventional susceptibility tests with direct detection of penicillin-binding protein 2a in borderline oxacillin-resistant strains of Staphylococcus aureus.
AUTHOR: Gerberding J L; Miick C; Liu H H; Chambers H F
CORPORATE SOURCE: Department of Medicine, University of California, San Francisco 94110.
CONTRACT NUMBER: 5 T32 GM07546 (NIGMS)
AI 27406 (NIAID)
SOURCE: ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, (1991 Dec) 35 (12) 2574-9.
Journal code: 6HK; 0315061. ISSN: 0066-4804.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199205
ENTRY DATE: Entered STN: 19920612
Last Updated on STN: 19980206
Entered Medline: 19920528

AB Six selected strains of Staphylococcus aureus classified as borderline oxacillin-resistant, according to standard disk diffusion and microdilution susceptibility test methods, and seven methicillin-resistant and seven methicillin-susceptible control strains were examined for the presence of penicillin-binding protein 2a (PBP 2a) by fluorography and immunoblotting and for DNA hybridization with a mec-specific probe in a dot blot assay. Oxacillin agar screen tests with and without NaCl supplementation were also performed with all strains. PBP 2a was detected both by fluorography and by immunoblotting in all seven methicillin-resistant control strains and in none of the susceptible controls. PBP 2a was detected in two borderline strains. Results of agar screen tests performed without NaCl supplementation were completely concordant with susceptibility determined by PBP 2a and mec detection methods. Agar screening with NaCl supplementation was less accurate. These findings were confirmed with 20 additional borderline strains. Direct detection methods for the presence of PBP 2a or mec, the gene encoding it, allow accurate and definitive classification of borderline strains. Further efforts to develop a rapid, clinically useful, antibody detection system for PBP 2a are warranted.

L199 ANSWER 15 OF 53 MEDLINE
ACCESSION NUMBER: 89228099 MEDLINE
DOCUMENT NUMBER: 89228099 PubMed ID: 3149896
TITLE: [Synthesis and antimycobacterial action of lipophilic

substituted 2,4-diamino-5-benzylpyrimidines].
Synthese und antimykobakterielle Wirkung einiger lipophil substituierter 2,4-Diamino-5-benzylpyrimidine.
AUTHOR: Hachtel G; Haller R; Seydel J K
CORPORATE SOURCE: Pharmazeutisches Institut der Christian-Albrechts-Universitat, Kiel.
SOURCE: ARZNEIMITTEL-FORSCHUNG, (1988 Dec) 38 (12) 1778-83.
Journal code: 91U; 0372660. ISSN: 0004-4172.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198906
ENTRY DATE: Entered STN: 19900306
Last Updated on STN: 19970203
Entered Medline: 19890602

AB 2,4-Diamino-5-benzylpyrimidines 1-23 with lipophilic substitution in the benzylic moiety were synthesized by the morpholino-anilino-procedure. Their effects against various mycobacteria were verified by MIC (minimum inhibitory concentration) in whole cells and I50-measurements in whole cell and cell-free systems. Especially the substances 7-12 are strong inhibitors of some atypical mycobacterial strains which are sometimes associated with tuberculosis in the elderly and with AIDS. They might be promising candidates for therapy.

L199 ANSWER 16 OF 53 MEDLINE
ACCESSION NUMBER: 89090604 MEDLINE
DOCUMENT NUMBER: 89090604 PubMed ID: 3208548
TITLE: Conditions affecting the results of susceptibility testing for the quinolone compounds.
AUTHOR: Smith S M; Eng R H; Cherubin C E
CORPORATE SOURCE: Microbiology Section, Veterans Administration Medical Center, East Orange, N.J.
SOURCE: CHEMOTHERAPY, (1988) 34 (4) 308-14.
Journal code: D15; 0144731. ISSN: 0009-3157.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198902
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19970203
Entered Medline: 19890215

AB The quinolone class of compounds was studied for conditions which might affect susceptibility results. These compounds included amifloxacin, ciprofloxacin, difloxacin, enoxacin, norfloxacin, ofloxacin, and RO 23-6240. Ciprofloxacin, a representative quinolone, was found to have rapid bactericidal activity, equivalent to that of gentamicin, in contrast to the slower activity of a cephalosporin, cefotaxime. Test conditions that might affect susceptibility test results included divalent magnesium and calcium cation concentrations and pH. For strains of Staphylococcus aureus, Enterobacteriaceae, and enterococcus, the effects were not large. A pH of 5.0 in general increased the minimum inhibitory concentrations (MICs) for the organisms against most carboxyquinolones, up to 8-fold, as compared to that at pH 7.4. In comparison, a similar lowering of pH caused an increased in MIC of 32-fold for gentamicin and no change for cefotaxime. Increasing the concentrations of divalent cations increased the MICs on the average of only 4-fold. Of the quinolones, difloxacin was the least affected by change in concentration of divalent cations and by pH. Such changes are not expected to greatly affect the efficacy of therapy of those members of Enterobacteriaceae which have MICs much less than 0.1 micrograms/ml, but might diminish therapeutic efficacy for those organisms such as Streptococcus aureus with MICs of 1.0 microgram/ml or

higher.

L199 ANSWER 17 OF 53 BIOTECHNO COPYRIGHT 2001 Elsevier Science B.V.
ACCESSION NUMBER: 2000:32868219 BIOTECHNO
TITLE: Nuances in **antimicrobial susceptibility testing** for resistant gram-positive organisms
AUTHOR: Stratton C.W.
CORPORATE SOURCE: Dr. C.W. Stratton, Vanderbilt Univ. School of Medicine, Nashville, TN, United States.
SOURCE: Antimicrobics and Infectious Diseases Newsletter, (2000), 18/8 (57-64), 95 reference(s)
CODEN: AIDIEX ISSN: 1069-417X
DOCUMENT TYPE: Journal; General Review
COUNTRY: United States
LANGUAGE: English

L199 ANSWER 18 OF 53 BIOTECHNO COPYRIGHT 2001 Elsevier Science B.V.
ACCESSION NUMBER: 1999:29044097 BIOTECHNO
TITLE: A new gel tube method for the direct detection, identification and **susceptibility** testing of **bacteria** in clinical samples
AUTHOR: Langlet S.; Beaupere F.; Contant G.; Scheftel J.M.
CORPORATE SOURCE: G. Contant, Departement de Microbiologie, 92635 Gennevilliers Cedex, France.
E-mail: gcontant@serbio.fr
SOURCE: FEMS Microbiology Letters, (1999), 170/1 (229-235), 8 reference(s)
CODEN: FMLED7 ISSN: 0378-1097
PUBLISHER ITEM IDENT.: S037810979800545X
DOCUMENT TYPE: Journal; Article
COUNTRY: Netherlands
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We recently developed a simple new method which is designed to separate and concentrate bacteria from a sample by centrifugation in a gel system. Bacterial **enzyme** activity is then detected inside the gel without further manipulation using a colorimetric or fluorogenic substrate. The method provides a rapid, direct means of detecting bacteria in clinical samples, dispensing with the 24-h period normally required to isolate colonies on agar. Various applications of the method are described below, e.g. screening of negative urine samples, identification of Escherichia coli in urine samples, identification of Staphylococcus aureus in blood culture broths and detection of oxacillin-resistant S. aureus in blood culture broths. The advantages of the gel system and other applications are discussed. Copyright (C) 1999 Federation of European Microbiological Societies.

L199 ANSWER 19 OF 53 BIOTECHNO COPYRIGHT 2001 Elsevier Science B.V.
ACCESSION NUMBER: 1993:23331472 BIOTECHNO
TITLE: Staphylococcus epidermidis hospital epidemiology and the detection of methicillin resistance
AUTHOR: Hedin G.
CORPORATE SOURCE: Department of Clinical Microbiology, University Hospital,Uppsala S-75185, Sweden.
SOURCE: Scandinavian Journal of Infectious Diseases, Supplement, (1993), -/90 (1-59)
CODEN: SJISAH ISSN: 0300-8878
DOCUMENT TYPE: Journal; Article
COUNTRY: Norway
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Infections in immunocompromised patients and in patients with indwelling

prosthetic devices are often caused by hospital strains of Staphylococcus epidermidis resistant to methicillin. Tests for the detection of methicillin resistance, indicating resistance to all .beta.-lactam antibiotics, were evaluated in order to define a suitable screening test. A broth tube breakpoint test with a large inoculum, 10.sup.7 colony forming units (cfu), gave the highest recovery of resistant strains. False resistance due to hyperproduction of .beta.-lactamase was excluded. The results correlated completely with the detection of the resistance gene, mecA, by the polymerase chain reaction. In 2/3 of the resistant strains tested the expression of the methicillin resistance was heterogeneous, only one cell in 10.sup.2 to 10.sup.4 expressed the resistance within 72 h in broth. In broth screening tests an inoculum of at least 10.sup.6 cfu therefore was required to detect all resistant strains within 24 h. Using agar dilution, 48 h incubation must be considered. In disc diffusion tests reliable results were obtained after only 16 h of incubation when discs containing cephradine 5 and 30 .mu.g, oxacillin 1 .mu.g or cephalexin 30 .mu.g were used, and the first disc is recommended for routine work. The epidemiology of S. epidermidis strains resistant to ciprofloxacin and/or gentamicin was studied in an isolation unit for patients undergoing bone marrow transplantation. Antibiograms and plasmids were used for typing and 31 such strains were found. Of 54 staff members 10 were colonized in the nares only, two in the nares and perineum and one in the nares and stool. In ambient air and on the clothes of staff a few of the strains predominated quantitatively. These strains colonized the skin of some of the patients who seemed to be the main dispersers. Possible routes of cross-infection were indirect contact transfer via the hands and clothes of staff (82% of the clothes were contaminated), and direct as well as indirect airborne transmission. To study the effects of chlorhexidine on skin bacteria, ten nurses washed one arm with chlorhexidine-detergent every morning for 3 weeks; the other arm served as control. The depression of the normal skin flora did not lead to a colonization with more antibiotic-resistant hospital strains. During the wash period the counts of antibiotic-resistant S. epidermidis on the treated arms were significantly reduced compared with the control arms, as also were the number of different strains. However, some antibiotic-resistant strains could not be eradicated from the arms with chlorhexidine-detergent, probably because they colonized deeper layers of the skin. Many strains were only transient skin colonizers. In an experimental study, strains of S. epidermidis were inoculated on the skin of volunteers. An epidemic strain had an enhanced ability to colonize skin compared with non-epidemic strains, which may be of importance for its epidemic properties.

L199 ANSWER 20 OF 53 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 1
ACCESSION NUMBER: 1979:162560 CAPLUS
DOCUMENT NUMBER: 90:162560
TITLE: Low trimethoprim susceptibility of anaerobic bacteria due to insensitive **dihydrofolate reductases**
AUTHOR(S): Then, Rudolf L.; Angehrn, Peter
CORPORATE SOURCE: Pharm. Res. Dep., F. Hoffmann-La Roche and Co., Ltd., Basel, Switz.
SOURCE: Antimicrob. Agents Chemother. (1979), 15(1), 1-6
CODEN: AMACCQ; ISSN: 0066-4804
DOCUMENT TYPE: Journal
LANGUAGE: English
AB All the 28 Bacteroides fragilis strains investigated were susceptible to sulfamethoxazole (I) [723-46-6] (minimal inhibitory concn. <16 .mu.g/mL) and resistant to trimethoprim (II) [738-70-5] (minimal inhibitory concn. >4 .mu.g/mL). Synergism between I and II was present in all strains at a ratio of 1:1. The few clostridia investigated were more resistant to both compds. **Dihydrofolate reductase** [**9002-03-3**] enzymes from B. fragilis, Clostridium perfringens, and some other

anaerobic species were isolated. Inhibition profiles with 6 structurally different inhibitors revealed major differences in all enzymes. For 50% inhibition, the enzyme from B. fragilis and all clostridia required concns. of II which were 100-1000-fold higher than those required for the enzyme of Escherichia coli, whereas the enzyme from Propionibacterium acnes only needed a 3-fold higher concn. In vitro activities of II corresponded to the activity at the enzymic level in B. fragilis and P. acnes, but corresponded to a much lesser extent to the activity at the enzymic level in clostridia. **Dihydrofolate reductase** inhibitors other than II were as active as II both at the enzyme and in vitro. In B. fragilis, higher concns. of exogenous thymidine [50-89-5] were required for increasing the minimal inhibitory concn. of II than in E. coli.

IT **9002-03-3**
RL: PRP (Properties)
(of bacteria, trimethoprim resistance in relation to)

L199 ANSWER 21 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:781168 CAPLUS
DOCUMENT NUMBER: 135:341165
TITLE: Assay for identification of a test compound binding to a target RNA using a RNA-modifying enzyme
INVENTOR(S): Murchie, Alastair Iain Hamilton; Lentzen, Georg Friedrich
PATENT ASSIGNEE(S): Ribotargets Limited, UK
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001079543	A2	20011025	WO 2001-GB1778	20010419

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2000-9772 A 20000419
US 2000-198179 P 20000419

AB A method for detg. whether a test compd. binds to a target RNA, the method comprising the steps of: (a) contacting the test compd. with the target RNA and a RNA modifying enzyme; and (b) detecting the modification of the target RNA by the enzyme and comparing the amt. of modification detected to that of a std. Inhibition of enzymic modification of the RNA target indicates that the test compd. can bind the target RNA and can thus exhibit antibiotic activity. Various concns. of the L11 ribosomal protein were incubated with the Escherichia coli mGAR (methylatable GTPase-activating region) of 23S rRNA, [3H]-S-adenosyl-methionine and tsr methyltransferase. Methylation was inhibited as L11 concn. increased.

IT **7786-30-3, Magnesium chloride**, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(ErmE methyltransferase dependence on; assay for identification of test compds. binding to target RNA using RNA-modifying enzyme)

L199 ANSWER 22 OF 53 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:756549 CAPLUS
DOCUMENT NUMBER: 133:319052
TITLE: Sortase-transamidases from Gram-positive bacteria and their uses for drug screening and peptide and protein display
INVENTOR(S): Schneewind, Olaf; Mazmanian, Sarkis; Liu, Gwen; Ton-That, Hung
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: PCT Int. Appl., 126 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000062804	A2	20001026	WO 2000-US10198	20000413

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-292437 A 19990415

AB The present invention is directed to sortase-transamidase enzymes from gram-pos. bacteria, particularly the products of the surface protein sorting (srtA) gene of Staphylococcus aureus, and methods for their use, particularly in the areas of drug screening and peptide and protein display. Amino acid and nucleotide sequences are provided for the enzyme and srtA gene from S. aureus. Typically, the gram-pos. bacterium is a species selected from the group Staphylococcus aureus, Streptococcus pyogenes, Actinomyces naeslundii, Enterococcus faecalis, Streptococcus mutans, Streptococcus pneumoniae, and Bacillus subtilis. The Sortase-transamidase enzyme catalyzes a reaction that covalently crosslinks the C-terminus of a protein having a sorting signal to the peptidoglycan of a gram-pos. bacterium, the sorting signal having a motif of LPX3X4G therein, wherein sorting occurs by cleavage between the forth and fifth residues of the LPX3X4G motif. An assay for sortase-transamidase can be performed by monitoring the capture of a sol. peptide that is a substrate for the enzyme by its interaction with an affinity resin. Sortase-transamidase is a target for antibiotic action. In addn., its crosslinking activity can be used for protein and peptide display on the surface of gram-pos. bacteria, and sorted mols. can be used for the diagnosis and treatment of bacterial infections and for the prodn. of vaccines.

L199 ANSWER 23 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:276127 CAPLUS
DOCUMENT NUMBER: 133:101525
TITLE: A simple screen for murein transglycosylase inhibitors
AUTHOR(S): Vollmer, Waldemar; Holtje, Joachim-Volker
CORPORATE SOURCE: Max-Planck-Institut fur Entwicklungsbiologie, Abteilung Biochemie, Tubingen, 72076, Germany
SOURCE: Antimicrob. Agents Chemother. (2000), 44(5), 1181-1185
CODEN: AMACCQ; ISSN: 0066-4804
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A simple assay for detection of compds. that bind to the active site in

the transglycosylation domain of the essential bifunctional transglycosylase and **transpeptidase** penicillin-binding proteins (PBPs) is reported. The method is based on a competition with the specific transglycosylase inhibitor moenomycin. With moenomycin coupled to Affi-Gel beads, a simple filtration procedure allows the amt. of labeled PBPs that bind to moenomycin beads in the presence of test substances to be detd. The PBPs can easily be labeled by the covalent binding of penicillin derivs. Crude membrane exts. can be used as a source for the PBPs, and different kinds of labels for the penicillin-PBP complexes can be used. The assay can be adapted to high-throughput screens.

REFERENCE COUNT: 29
REFERENCE(S):
(1) Anderson, J; J Biol Chem 1967, V242, P3180 CAPLUS
(2) Brotz, H; Eur J Biochem 1997, V246, P193 CAPLUS
(4) Dargis, M; Antimicrob Agents Chemother 1994, V38, P973 CAPLUS
(5) Edwards, D; Bacterial growth and lysis 1993, P369 CAPLUS
(6) Ghuysen, J; Bacterial cell wall 1994, P103 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 24 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:250587 CAPLUS
DOCUMENT NUMBER: 133:28391
TITLE: Characterization of multi-drug resistant Salmonella typhi isolated from Pakistan
AUTHOR(S): Shanahan, P. M. A.; Karamat, K. A.; Thomson, C. J.; Amyes, S. G. B.
CORPORATE SOURCE: Department of Medical Microbiology, University of Edinburgh, Edinburgh, EH8 9AG, UK
SOURCE: Epidemiol. Infect. (2000), 124(1), 9-16
CODEN: EPINEU; ISSN: 0950-2688
PUBLISHER: Cambridge University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Thirty-nine strains of Salmonella typhi isolated in 1995 from four Districts in Pakistan, Rawalpindi, Islamabad, Kharian and Jehlem, were catalogued and examd. Chromosomal DNA from each isolate was digested with Xba1 restriction endonuclease and subjected to pulsed-field gel electrophoresis. Three clonal variants comprising of 17-19 DNA fragments were identified. **Antibiotic susceptibility** testing identified that 37 of the S. typhi were resistant to chloramphenicol, trimethoprim and ampicillin. These antibiotic resistance genes were found to be located on one of four plasmids belonging to incompatibility group IncH11 and ranging in size from 150-175 Kb. The genes responsible for this resistance in each case were the chloramphenicol acetyltransferase (CAT) type I, the **dihydrofolate reductase** (DHFR) type VII and the .beta.-lactamase TEM-1 genes, resp.

IT **9002-03-3, Dihydrofolate reductase**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type VII, gene for; multi-drug resistant Salmonella typhi isolated from Pakistan)

REFERENCE COUNT: 30
REFERENCE(S):
(1) Adrian, P; Epidemiol Infect 1995, V115, P255 CAPLUS
(2) Adrian, P; J Antimicrob Chemother 1995, V35, P497 CAPLUS
(3) Amyes, S; Ann Microbiol l'Inst Pasteur 1984, V135B, P177 CAPLUS
(6) Du Bois, S; J Antimicrob Chemother 1995, V35, P7 CAPLUS
(8) Gabant, P; J Bacteriol 1993, V175, P7697 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 25 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:672683 CAPLUS
DOCUMENT NUMBER: 129:272687
TITLE: Bacteria and fungi detection based on murein binding polypeptides
INVENTOR(S): Laine, Roger A.; Lo, Wai Chun Jennifer
PATENT ASSIGNEE(S): Board of Supervisors of Louisiana State University and Agricultural and Mech, USA
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9842864	A1	19981001	WO 1998-US5580	19980320
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5935804	A	19990810	US 1997-823293	19970321
AU 9869401	A1	19981020	AU 1998-69401	19980320
EP 980439	A1	20000223	EP 1998-915148	19980320
R: CH, DE, DK, FR, GB, IT, LI, NL, SE, FI				
US 6090573	A	20000718	US 1999-261664	19990303
US 6159719	A	20001212	US 1999-261665	19990303

PRIORITY APPLN. INFO.: US 1997-823293 A2 19970321
WO 1998-US5580 W 19980320

AB This invention describes a method for detecting bacteria and fungi based on murein binding polypeptides and conjugates. The murein binding polypeptides may be proteins or enzymes with murein binding properties. The binding of the murein binding polypeptides with bacteria or fungi can be detd. by methods such as flow cytometry. The murein binding polypeptide and conjugates can also be used to test for antibiotic susceptibility and to detect eubacteria and fungus in biol. samples. Diagnostic reagents and kits contg. the murein binding polypeptide and conjugates for use in these assays are provided. The use of the murein binding polypeptides in the characterization of urinary tract infections is illustrated.

L199 ANSWER 26 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:446850 CAPLUS
DOCUMENT NUMBER: 125:81292
TITLE: Medium for detecting enterococci in a sample
INVENTOR(S): Chen, Chun-Ming; Gu, Haoyi
PATENT ASSIGNEE(S): Idexx Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9615435	A2	19960523	WO 1995-US13579	19951023

WO 9615435 A3 19960815
W: CA, JP, MX
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 5620865 A 19970415 US 1994-335149 19941104
EP 871854 A2 19981021 EP 1995-938833 19951023
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
BR 9505075 A 19971021 BR 1995-5075 19951103
PRIORITY APPLN. INFO.: US 1994-335149 19941104
WO 1995-US13579 19951023

AB Medium for growing enterococci, including fecal streptococci, is disclosed with which detection may be obtained within 24 h. The medium contains an effective amt. of vitamins, amino acids, trace elements, and salts that allow viability and reprodn. of enterococci in the presence of a nutrient indicator (e.g., 4-methylumbelliferyl-.beta.-D-glucopyranoside which is a substrate for .beta.-glucosidase). The medium also contains agents that can inhibit growth of nontarget (i.e., nonenterococcal) microorganisms.

IT **26628-22-8, Sodium azide**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(medium for detecting enterococci and fecal streptococci within 24 h)

L199 ANSWER 27 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:331556 CAPLUS
DOCUMENT NUMBER: 125:29877
TITLE: Antibacterial activities of epiroprim, a new **dihydrofolate reductase** inhibitor, alone and in combination with dapsone
AUTHOR(S): Locher, Hans H.; Schlunegger, Heidi; Hartman, Peter G.; Angehrn, Peter; Then, Rudolf L.
CORPORATE SOURCE: Preclinical Research, F. Hoffmann-La Roche Ltd., Basel, CH-4002, Switz.
SOURCE: Antimicrob. Agents Chemother. (1996), 40(6), 1376-1381
CODEN: AMACCQ; ISSN: 0066-4804
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Epiroprim (Ro 11-8958, I) is a new selective inhibitor of microbial **dihydrofolate reductase**. I displayed excellent activity against staphylococci, enterococci, pneumococci, and streptococci which was considerably better than that of trimethoprim (TMP). I was also active against TMP-resistant strains, although the MICs were still relatively high. Its combination with dapsone (DDS) was synergistic and showed an in vitro activity superior to that of the TMP combination with sulfamethoxazole (SMZ). The I-DDS (ratio, 1:19) combination inhibited more than 90% of all important gram-pos. pathogens at a concn. of 2 + 38 .mu.g/mL. Only a few highly TMP-resistant staphylococci and enterococci were not inhibited. I was also more active than TMP against Moraxella catarrhalis, Neisseria meningitidis, and Bacteroides spp., but it was less active than TMP against all other gram-neg. bacteria tested. Atypical mycobacteria were poorly susceptible to I, but the combination with DDS was synergistic and active at concns. most probably achievable in biol. fluids (MICs from 0.25 + 4.75 to 4 + 76 .mu.g/mL). I and the I-DDS combination were also highly active against exptl. staphylococcal infections in a mouse septicemia model. The combination I-DDS has previously been shown to exhibit activity in Pneumocystis carinii and Toxoplasma models and, as shown in the present study, also shows good activity against a broad range of bacteria, including many strains resistant to TMP and TMP-SMZ.

L199 ANSWER 28 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1991:160265 CAPLUS
DOCUMENT NUMBER: 114:160265
TITLE: **Antimicrobial susceptibility testing** of Streptococcus pyogenes,

Streptococcus pneumoniae, Haemophilus influenzae and Branhamella catarrhalis by the broth microdilution method
AUTHOR(S): Sugiura, Akira; Takayama, Tamotsu; Jono, Kumiko
CORPORATE SOURCE: Takeda Anal. Res. Lab. Ltd., Osaka, 532, Japan
SOURCE: Chemotherapy (Tokyo) (1990), 38(12), 1160-70
CODEN: NKRZAZ; ISSN: 0009-3165
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB For min. inhibitory concn. (MIC) measurement for the title bacteria, optically clear and simple media for broth microdiln. testing using the MIC-2000 system with an auto-reader controlled by a personal computer was investigated. S. pyogenes, S. pneumoniae, and H. influenzae grew well in brain heart infusion broth (BHI), cooked meat medium (CM), and hemin (X-factor)- and .beta.-NAD (V-factor)-supplemented BHI, resp., and the viable cell counts remained unchanged for 15-22 h. The MICs were detd. in 5% horse serum-supplemented Mueller-Hinton broth, 5% horse serum-supplemented BHI, and X- and V-factor-supplemented BHI for S. pyogenes, S. pneumoniae, and H. influenzae, resp. The MICs of ampicillin, cefazolin, cefotiam, cefmenoxime, and gentamicin detd. in the media by the broth microdiln. method agreed approx. with those detd. by the std. agar diln. method recommended by Japan Chemotherapy Society, though the MICs of minocycline did not. B. catarrhalis produced pellets in cation-supplemented Mueller-Hinton broth in static culture, but the cells were dispersed sufficiently for inoculum prepn. in shaking culture, and the viable cell counts remained unchanged for 13-20 h. It was, however, difficult to det. the MICs against B. catarrhalis by auto-reader, since this organism sometimes produced pellets in the microplates for which there was no suitable shaking equipment. Authors investigated the susceptibility distribution of the 4 kinds of bacteria clin. isolated in 1989 to the 6 antibiotics mentioned above by the broth microdiln. method.
IT **7786-30-3, Magnesium chloride**, biological studies
RL: BIOL (Biological study)
(culture media contg. in antibiotic assay for Branhamella catarrhali.omega.)

L199 ANSWER 29 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1987:571887 CAPLUS
DOCUMENT NUMBER: 107:171887
TITLE: A rapid method for the determination of antibiotic resistance in bacterial pathogens within diseased specimens
AUTHOR(S): Austin, B.
CORPORATE SOURCE: Dep. Brew. Biol. Sci., Heriot-Watt Univ., Edinburgh, EH1 1HX, UK
SOURCE: FEMS Microbiol. Lett. (1987), 43(3), 295-300
CODEN: FMLED7; ISSN: 0378-1097
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title method involved use of an antibody-based bacteria-capturing system, exposure to antibiotic solns., and then detn. of viability by redn. of thiazolyl blue. Antibody-coated DE52 in a syringe was the best capture system. The bacterial suspension or tissue homogenate was added to the top of the DE52 and passed through, followed by washing. Then, an antibiotic soln. was added for 15 min, and after washing, the thiazolyl blue was added. Fish bacterial diseases were studied.
IT **1184-43-6**
RL: ANST (Analytical study)
(in bacteria antibiotic resistance tests)

L199 ANSWER 30 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1987:210453 CAPLUS

DOCUMENT NUMBER: 106:210453
TITLE: A direct bioautographic TLC assay for compounds possessing antibacterial activity
AUTHOR(S): Hamburger, Matthias O.; Cordell, Geoffrey A.
CORPORATE SOURCE: Coll. Pharm., Univ. Illinois, Chicago, IL, 60612, USA
SOURCE: J. Nat. Prod. (1987), 50(1), 19-22
CODEN: JNPRDF; ISSN: 0163-3864
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A simple bioassay for the direct detection of antibacterial compds. on TLC plates has been developed. A series of natural products and different stationary phases were tested in order to establish the utility of the assay for the isolation of antibacterial compds. from higher plants.
IT **1184-43-6**
RL: ANST (Analytical study)
(in natural product antibacterial activity detection, by on-plate bioassay after TLC)

L199 ANSWER 31 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1986:438447 CAPLUS
DOCUMENT NUMBER: 105:38447
TITLE: Determination of misreading effect of antibiotics with the aid of luminous bacteria
AUTHOR(S): Naveh, A.; Ulitzur, S.
CORPORATE SOURCE: Dep. Food Eng. Biotechnol., Technion - Israel Inst. Technol., Haifa, 32000, Israel
SOURCE: J. Microbiol. Methods (1986), 4(5-6), 241-9
CODEN: JMIMDQ; ISSN: 0167-7012
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A dark mutant of Photobacterium leiognathi is described with a presumably nonsense mutation in the gene coding for luciferase synthesis. Protein synthesis inhibitors increase the activity of luciferase in the dark mutant up to 100-fold. A simple and rapid test for protein synthesis inhibitors based on this system is described. Results are shown for antibiotics and EtOH.
IT **26628-22-8**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(streptomycin effect on Photobacterium leiognathi response to)

L199 ANSWER 32 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1985:610502 CAPLUS
DOCUMENT NUMBER: 103:210502
TITLE: Screening for new antifolates of microbial origin and a new antifolate AM-8402
AUTHOR(S): Omura, Satoshi; Murata, Masatsune; Kimura, Keiko; Matsukura, Shigekazu; Nishihara, Tatsuro; Tanaka, Haruo
CORPORATE SOURCE: Sch. Pharm. Sci., Kitasato Univ., Tokyo, 108, Japan
SOURCE: J. Antibiot. (1985), 38(8), 1016-24
CODEN: JANTAJ; ISSN: 0021-8820
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A screening method was established for new specific inhibitors of folate metab. Culture broths of soil isolates were selected on the basis of their antibacterial activity against Enterococcus faecium grown in a medium which contained a limited amt. of pteroic acid, and their lack of activity against the microorganism grown in a medium supplemented with thymidine. By this screening method, 3 new antibiotics, diazaquinomycins A (I) and B (II) and AM-8402 were selected from 8000 soil isolates. The isolation and structures of the diazaquinomycins are reported. AM-8402 is a new antifolate that is active against gram-pos. bacteria and

mycoplasmas. It consists of a nanaomycin D moiety as chromophore and a deoxysugar, and is structurally related to medermycin.

IT **4033-27-6**
RL: BIOL (Biological study)
(Enterococcus faecium growth response to)

L199 ANSWER 33 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1984:451293 CAPLUS
DOCUMENT NUMBER: 101:51293
TITLE: Discrimination of microorganisms, composition and element for the implantation thereof
INVENTOR(S): Guardino, Robert Francis; Belly, Robert Troconis
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 107594	A1	19840502	EP 1983-402067	19831025
EP 107594	B1	19880727		

R: DE, FR, GB
PRIORITY APPLN. INFO.: US 1982-436877 19821026

AB Colorimetric methods were described for discriminating viable gram-pos. and viable gram-neg. microorganisms. These methods mixed microorganisms, a compd. which could be reduced to a detectable species in the absence of any redn.-inhibiting materials by both gram-pos. and gram-neg. microorganisms, and an anionic surfactant in an amt. sufficient to selectively inhibit the redn. of the compd. by gram-pos. microorganisms. Thus, Escherichia coli (gram-neg.) and Staphylococcus aureus (gram-pos.) were discriminated by incubating with MTT, and anionic surfactants, e.g., Aerosol AY 100.

IT **1184-43-6**
RL: ANST (Analytical study)
(gram-pos. and gram-neg. microorganisms discrimination with)

L199 ANSWER 34 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1983:419579 CAPLUS
DOCUMENT NUMBER: 99:19579
TITLE: Spectrophotometric assessment of dose-response curves for single antimicrobial agents and antimicrobial combinations
AUTHOR(S): King, Thomas C.; Krogstad, Donald J.
CORPORATE SOURCE: Sch. Med., Washington Univ., St. Louis, MO, 63110, USA
SOURCE: J. Infect. Dis. (1983), 147(4), 758-64
CODEN: JIDIAQ; ISSN: 0022-1899
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The activity of single antimicrobial agents and antimicrobial combinations was examd. by measuring their effects on the growth rate const. of a test strain of Escherichia coli. This spectrophotometric method provides a kinetic view of antimicrobial action and is sufficiently precise to define dose-response curves, in contrast to std. methods, such as broth or agar diln. testing, which are static and measure only all-or-none responses. Dose-response curves for single antimicrobial agents are logarithmic (rather than linear), and the effects of antimicrobial combinations can be exquisitely concn.-dependent. Although the results for some antimicrobial combinations were similar with the spectrophotometric and checkerboard methods, other combinations produced different results in the 2 systems.

IT **26628-22-8**

RL: BIOL (Biological study)
(antimicrobial dose-response curve for, alone and in combinations, spectrophotometric assessment of)

L199 ANSWER 35 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1981:401080 CAPLUS
DOCUMENT NUMBER: 95:1080
TITLE: Mechanisms of trimethoprim resistance in Enterobacteria isolated in Finland
AUTHOR(S): Then, R. L.; Hermann, F.
CORPORATE SOURCE: Pharm. Res. Dep., F. Hoffmann-La Roche and Co. Ltd., Basel, CH-4002, Switz.
SOURCE: Chemotherapy (Basel) (1981), 27(3), 192-9
CODEN: CHTHBK; ISSN: 0009-3157
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Dihydrofolate reductase** (DHFR) [**9002-03-3**] enzymes were studied in 2 groups of trimethoprim (I) [738-70-5]-resistant enterobacteria, isolated in Turku, Finland. The 1st group consisted of 6 strains with a high level of I resistance (min. inhibitory concn. >1000 mg/L), all of which harbored an addnl. I-insensitive DHFR thought to be responsible for the high degree of resistance. Three Proteus mirabilis strains in this group synthesized chromosomal reductases with reduced I sensitivity as well. A 2nd group of 6 strains, exhibiting min. inhibitory concn. values for I between 16 and 512 mg/L was resistant by the prodn. of a chromosomally altered I-insensitive DHFR, produced either in normal or slightly elevated amts. With 1 exception these strains were all fully susceptible to sulfadiazine [68-35-9] and strong synergism with I was present. Resistance to nalidixic acid [389-08-2] was also frequently obsd. in this group. Thus, 3 different basic mechanisms were responsible for I resistance in enterobacteria from Finland and these occurred not only independently but also simultaneously in the same strain.
IT **9002-03-3**
RL: PRP (Properties)
(of enteric bacteria, trimethoprim resistance in relation to)

L199 ANSWER 36 OF 53 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1981:401101 CAPLUS
DOCUMENT NUMBER: 95:1101
TITLE: **Antibiotic susceptibility** of Treponema hyodysenteriae and its metabolic and physiological specificity: a simple **test** system for cytotoxicities of various drugs
AUTHOR(S): Arai, Toshihiko
CORPORATE SOURCE: Sch. Med., Keio Univ., Tokyo, Japan
SOURCE: Keio J. Med. (1980), 29(2), 81-90
CODEN: KJMEA9; ISSN: 0022-9717
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Susceptibility of T. hyodysenteriae to various antibiotics and metabolic inhibitors was examd. in comparison to those of various bacteria and fungi. As for susceptibility to DNA synthesis inhibitors, this treponema was sensitive to ethidium bromide [1239-45-8] and chloroquine diphosphate [50-63-5], but not to furazolidone [67-45-8]. This treponema was resistant to the RNA synthesis inhibitors rifampicin [13292-46-1] and actinomycin D [50-76-0], but sensitive to most of the protein synthesis inhibitors for prokaryotes and inhibitors of oxidative phosphorylation and electron transport systems, such as gramicidin S [113-73-5], azide, and antimycin [11118-72-2]. This treponema was also a little resistant to colistin sulfate [1264-72-8] and ampicillin [69-53-4] but very sensitive to clotrimazole [23593-75-1]. Apparently, this organism has a prokaryotic ribosome system but eukaryotic membrane and electron transport systems. Therefore, this organism may be used as an agar plate-culturable

indicator strain of eukaryotic membrane system to test the cytotoxicity of the newly developed antibacterial and other drugs.

IT **26628-22-8**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(Treponema hyodysenteriae sensitivity to)

L199 ANSWER 37 OF 53 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1998:302078 BIOSIS
DOCUMENT NUMBER: PREV199800302078
TITLE: Molecular analysis of and identification of antibiotic resistance genes in clinical isolates of Salmonella typhi from India.
AUTHOR(S): Shanahan, Philippa M. A.; Jesudason, Mary V.; Thomson, Christopher J.; Amyes, Sebastian G. B. (1)
CORPORATE SOURCE: (1) Dep. Med. Microbiol., Univ. Edinburgh, Teviot Place, Edinburgh EH8 9AG UK
SOURCE: Journal of Clinical Microbiology, (June, 1998) Vol. 36, No. 6, pp. 1595-1600.
ISSN: 0095-1137.
DOCUMENT TYPE: Article
LANGUAGE: English
AB A representative sample of 21 Salmonella typhi strains isolated from cultures of blood from patients at the Christian Medical College and Hospital, Vellore, India, were tested for their **susceptibilities** to various **antimicrobial** agents. Eleven of the S. typhi strains possessed resistance to chloramphenicol (256 mg/liter), trimethoprim (64 mg/liter), and amoxicillin (> 128 mg/liter), while four of the isolates were resistant to each of these agents except for amoxicillin. Six of the isolates were completely sensitive to all of the antimicrobial agents tested. All the S. typhi isolates were susceptible to cephalosporin agents, gentamicin, amoxicillin plus clavulanic acid, and imipenem. The antibiotic resistance determinants in each S. typhi isolate were encoded by one of four plasmid types. Plasmid-mediated antibiotic resistance genes were identified with specific probes in hybridization experiments; the genes responsible for chloramphenicol, trimethoprim, and ampicillin resistance were chloramphenicol acetyltransferase type I, **dihydrofolate reductase** type VII, and TEM-1 beta-lactamase, respectively. Pulsed-field gel electrophoresis analysis of XbaI-generated genomic restriction fragments identified a single distinct profile (18 DNA fragments) for all of the resistant isolates. In comparison, six profiles, different from each other and from the resistance profile, were recognized among the sensitive isolates. It appears that a single strain containing a plasmid conferring multidrug-resistance has emerged within the S. typhi bacterial population in Vellore and has been able to adapt to and survive the challenge of antibiotics as they are introduced into clinical medicine.

L199 ANSWER 38 OF 53 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1995:540968 BIOSIS
DOCUMENT NUMBER: PREV199598555268
TITLE: Characterisation of penA and tetM resistance genes of Neisseria gonorrhoeae isolated in southern Africa: Epidemiological monitoring and resistance development.
AUTHOR(S): Chalkley, L. J. (1); Van Vurren, S.; Ballard, R. C.; Botha, P. L. (1)
CORPORATE SOURCE: (1) Dep. Med. Microbiol., Univ. Orange Free State, Bloemfontein South Africa
SOURCE: SAMJ (South African Medical Journal), (1995) Vol. 85, No. 8, pp. 775-780.
ISSN: 0256-9574.
DOCUMENT TYPE: Article
LANGUAGE: English

AB Objective: To investigate penA and tetM resistance gene variation of Neisseria gonorrhoeae in order to define gene types for epidemiological monitoring and resistance development. Design: Isolates of N. gonorrhoeae which were susceptible and resistant to penicillin and/or tetracycline were selected. Strains comprised South African isolates (22 from Bloemfontein, 13 from Transvaal, 20 from the Cape) and 15 Botswana and 4 Namibia isolates. The penA genes (2 kb) of all strains and tetM genes (765 bp) of 11 high-level tetracycline-resistant strains were amplified and restricted with HpaII. Results and conclusions: Twelve different HpaII fingerprint patterns were obtained from the 74 isolates analysed for penicillin-binding protein (PBP) 2 gene (penA) alterations. Focusing on the **transpeptidase** domain, 25 isolates (3 whole gene patterns, minimal inhibitory concentrations (MICs) ltoreq 0,03 - 0,125 mu-g/ml) had restriction sites equivalent to those previously described for a susceptible strain. Of the remaining 9 PBP 2 gene groups, 25 strains fell into a designated group E. Penicillin/ penicillin + clavulanic acid MICs determined on these group E isolates gave a range of 0,125 - 2,0 mu-g/ml, although MICs against 4 strains were ltoreq 0,03 pg/ml. MICs of penicillin/penicillin + clavulanic acid for the 24 isolates that contained altered PBP 2 **transpeptidase** gene regions not designated group E were only ltoreq 0,03 - 0,125 mu-g/ml. The lack of a HpaII restriction site at nucleotide 1934 in the PBP 2 gene of group E strains was indicative of a small terminal region of N. cinerea DNA. This gene block, which was found in all the southern African areas studied, appears to predispose isolates to increased penicillin resistance. The 25.2 MDa conjugative plasmid carrying the tetM resistance determinant was readily demonstrated in 11 Botswana/Namibia isolates exhibiting high-level resistance to tetracycline (MICs gtoreq 16 mu-g/ml). The tetM gene was shown to be of the American type.

L199 ANSWER 39 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001433572 EMBASE
TITLE: Antimicrobial resistance: Guidelines for the practicing orthopaedic surgeon.
AUTHOR: Osmon D.R.
CORPORATE SOURCE: Dr. D.R. Osmon, Division of Infectious Diseases, Department of Internal Medicine, Mayo Clinic and Mayo Foundation, 200 First Street S.W., Rochester, MN 55905, United States
SOURCE: Journal of Bone and Joint Surgery - Series A, (2001) 83/12 (1891-1901).
Refs: 111
ISSN: 0021-9355 CODEN: JBJSA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 030 Pharmacology
033 Orthopedic Surgery
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English

L199 ANSWER 40 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000436632 EMBASE
TITLE: Mechanism of the antimicrobial drug trimethoprim revisited.
AUTHOR: Quinlivan E.P.; McPartlin J.; Weir D.G.; Scott J.
CORPORATE SOURCE: J. McPartlin, Vitamin Research Laboratory, Sir Patrick Duns Trinity Coll. Lab., St. James's Hospital, Dublin 8, Ireland. jmcprtln@tcd.ie
SOURCE: FASEB Journal, (2000) 14/15 (2519-2524).
Refs: 17
ISSN: 0892-6638 CODEN: FAJOEC
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology

030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We tested the hypothesis that the mechanism of action of the antifolate drug trimethoprim is through accumulation of bacterial dihydrofolate resulting in depletion of tetrahydrofolate coenzymes required for purine and pyrimidine biosynthesis. The folate pool of a strain of Escherichia coli (NCIMB 8879) was prelabeled with the folate biosynthetic precursor [3H]-p-aminobenzoic acid before treatment with trimethoprim. Folates in untreated E. coli were present as tetrahydrofolate coenzymes. In trimethoprim-treated cells, however, a rapid transient accumulation of dihydrofolate occurred, followed by complete conversion of all forms of folate to cleaved catabolites (pteridines and para-aminobenzoylglutamate) and the stable nonreduced form of the vitamin, folic acid. Both para-aminobenzoylglutamate and folic acid were present in the cell in the form of polyglutamates. Removal of trimethoprim resulted in the reconversion of the accumulated folic acid to tetrahydrofolate cofactors for subsequent participation in the one-carbon cycle. Whereas irreversible catabolism is probably bactericidal, conversion to folic acid may constitute a bacteriostatic mechanism since, as we show, folic acid can be used by the bacteria and proliferation is resumed once trimethoprim is removed. Thus, the clinical effectiveness of this important drug may depend on the extent to which the processes of either catabolism or folic acid production occur in different bacteria or during different therapeutic regimes.

L199 ANSWER 41 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001000312 EMBASE
TITLE: Susceptibility of Gram-positive cocci from 25 UK hospitals to antimicrobial agents including linezolid.
AUTHOR: Henwood C.J.; Livermore D.M.; Johnson A.P.; James D.; Warner M.; Gardiner A.
CORPORATE SOURCE: C.J. Henwood, Antibiotic Resist. Monit./Ref. Lab., Central Public Health Laboratory, Colindale Avenue, London NW9 5HT, United Kingdom. chenwood@phls.nhs.uk
SOURCE: Journal of Antimicrobial Chemotherapy, (2000) 46/6 (931-940).
Refs: 27
ISSN: 0305-7453 CODEN: JACHDX
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The prevalence of antibiotic resistance amongst Gram-positive cocci from 25 UK hospitals was studied over an 8 month period in 1999. A total of 3770 isolates were tested by the sentinel laboratories using the Etest; these bacteria comprised 1000 pneumococci, 1005 Staphylococcus aureus, 769 coagulase-negative staphylococci (CNS) and 996 enterococci. To ensure quality, 10% of the isolates were retested centrally, as were any found to express unusual resistance patterns. The prevalence of penicillin-resistant Streptococcus pneumoniae, vancomycin-resistant enterococci and methicillin-resistant S. aureus (MRSA) varied widely amongst the sentinel laboratories. The resistance rates to methicillin among S. aureus and CNS were 19.2 and 38.9%, respectively, with MRSA rates in individual sentinel sites ranging from 0 to 43%. No glycopeptide resistance was seen in S. aureus, but 6.5% of CNS isolates were teicoplanin resistant and 0.5% were vancomycin resistant. Vancomycin resistance was much more frequent among Enterococcus faecium (24.1%) than E. faecalis (0.5%) ($P < 0.05$), with most resistant isolates carrying vanA. The rate of penicillin resistance in pneumococci was 8.9%, and this

resistance was predominantly intermediate (7.9%), with only six hospitals reporting isolates with high level resistance. The prevalence of erythromycin resistance among pneumococci was 12.3%, with the majority of resistant isolates having the macrolide efflux mechanism mediated by mefE. All the organisms tested were susceptible to linezolid with MICs in the range 0.12-4 mg/L. The modal MICs of linezolid were 1 mg/L for CNS and pneumococci, and 2 mg/L for S. aureus and enterococci. Linezolid was the most potent agent tested against Gram-positive cocci, including multiresistant strains, and as such may prove a valuable therapeutic option for the management of Gram-positive infections in hospitals.

L199 ANSWER 42 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000063613 EMBASE
TITLE: Comparison of a commercial disk test with vancomycin and colimycin susceptibility testing for identification of bacteria with abnormal Gram staining reactions.
AUTHOR: Fenollar F.; Raoult D.
CORPORATE SOURCE: D. Raoult, CNRS UPRESA 6020, Faculte de Medecine, Universite de la Mediterranee, 27 Boulevard Jean Moulin, 13385 Marseille Cedex 05, France. Didier.Raoult@univ.mrs.fr
SOURCE: European Journal of Clinical Microbiology and Infectious Diseases, (2000) 19/1 (33-38).
Refs: 21
ISSN: 0934-9723 CODEN: EJCDEU
COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB In an effort to identify bacteria that fail to give the expected Gram reaction, thus leading to misidentification, two nonstaining tests for Gram reaction, vancomycin and colimycin susceptibility testing and the Gram-Sure test (Remel, USA), were employed on 145 strains from 42 gram-negative and gram-positive genera with contradictory Gram stain results. The Gram-Sure test is a commercially available disk that detects the presence of L-alanine-aminopeptidase, an enzyme usually found only in the cell wall of gram-negative bacteria. In this test, aminopeptidase activity is detected using a substrate that can be hydrolyzed to produce a fluorescent compound under long-wave UV light. The commercial disk test and vancomycin plus colimycin susceptibility testing appeared to perform equally well except in the identification of Erysipelothrix and Lactobacillus, for which the commercial disk test was better, and Moraxella, for which vancomycin and colimycin susceptibility testing was more helpful. An advantage of the commercial disk test is that it can be performed in 10 min, whereas vancomycin and colimycin susceptibility testing requires at least 18 h. The commercial disk test is also less expensive than vancomycin and colimycin susceptibility testing. However, since the same results can be obtained with the 5 .mu.g and 30 .mu.g vancomycin disks, it is possible to use only one vancomycin disk, with the cost then being equivalent to that of the commercial disk test. The major inconvenience of the commercial disk test is the requirement of a UV ray. However, this test could be a useful tool for the identification of unusual organisms.

L199 ANSWER 43 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1999374296 EMBASE
TITLE: Robbins device in biofilms research.
AUTHOR: Kharazmi A.; Giwercman B.; Hoiby N.
CORPORATE SOURCE: A. Kharazmi, Department of Clinical Microbiology, University Hospital (Rigshospitalet), University of Copenhagen, DK-2200 Copenhagen, Denmark
SOURCE: Methods in Enzymology, (1999) 310/- (207-215).

ISSN: 0076-6879 CODEN: MENZAU
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
037 Drug Literature Index
LANGUAGE: English

L199 ANSWER 44 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 95335070 EMBASE
DOCUMENT NUMBER: 1995335070
TITLE: Evaluation of potent inhibitors of dihydrofolate reductase in a culture model for growth of Pneumocystis carinii.
AUTHOR: Bartlett M.S.; Shaw M.; Navaran P.; Smith J.W.; Queener S.F.
CORPORATE SOURCE: Dept. of Pharmacology and Toxicology, Indiana University Sch. of Medicine, 635 Barnhill Dr.,Indianapolis, IN 46202-5120, United States
SOURCE: Antimicrobial Agents and Chemotherapy, (1995) 39/11 (2436-2441).
ISSN: 0066-4804 CODEN: AMACCQ
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Many antifolates are known to inhibit dihydrofolate reductase from murine Pneumocystis carinii, with 50% inhibitory concentrations (IC50s) ranging from 10-4 to 10-11 M. The relationship of the potency against isolated enzyme to the potency against intact murine P. carinii cells was explored with 17 compounds that had proven selectivity for or potency against P. carinii dihydrofolate reductase. Pyrimethamine and one analog were inhibitory to P. carinii in culture at concentrations two to seven times the IC50s for the enzyme, suggesting that the compounds may enter P. carinii cells in culture. Methotrexate was a potent inhibitor of P. carinii dihydrofolate reductase, but the concentrations effective in culture were more than 1,000- fold higher than IC50s for the enzyme, since P. carinii lacks an uptake system for methotrexate. Analogs of methotrexate in which chlorine, bromine, or iodine was added to the phenyl ring had improved potency against the isolated enzyme but were markedly less effective in culture; polyglutamation also lowered the activity in culture but improved activity against the enzyme. Substitution of a naphthyl group for the phenyl group of methotrexate produced a compound with improved activity against the enzyme (IC50, 0.00019 .mu.M) and excellent activity in culture (IC50, 0.1 .mu.M). One trimetrexate analog in which an aspartate or a chlorine replaced two of the methoxy groups of trimetrexate was much more potent and was much more selective toward P. carinii dihydrofolate reductase than trimetrexate; this analog was also as active as trimetrexate in culture. These studies suggest that modifications of antifolate structures can be made that facilitate activity against intact organisms while maintaining the high degrees of potency and the selectivities of the agents can be made.

L199 ANSWER 45 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 94159989 EMBASE
DOCUMENT NUMBER: 1994159989
TITLE: Development of a technique for detecting antimicrobial susceptibility of unculturable gastric spiral bacterium Gastrospirillum hominis.

AUTHOR: Diker K.S.; Hascelik G.; Diker S.
CORPORATE SOURCE: Department of Microbiology, Faculty of Veterinary Medicine, Ankara University,Ankara 06110, Turkey
SOURCE: Journal of Antimicrobial Chemotherapy, (1994) 33/4 (867-870).
ISSN: 0305-7453 CODEN: JACHDX
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
037 Drug Literature Index
048 Gastroenterology
LANGUAGE: English

L199 ANSWER 46 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 92288275 EMBASE
DOCUMENT NUMBER: 1992288275
TITLE: New rapid drug susceptibility tests based on microorganism enzyme activity. Part 2: Examination of resazurin coloration method using 10 antibiotics.
AUTHOR: Karuyama H.
CORPORATE SOURCE: Department of Clinical Laboratory, Osaka Pref. Rehabilitation Ctr. Hosp, 4-3-1 Asahigaoka Nakamachi,Sakai, Japan
SOURCE: Chemotherapy, (1992) 40/7 (870-878).
ISSN: 0009-3165 CODEN: NKRZAZ
COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
037 Drug Literature Index
LANGUAGE: Japanese
SUMMARY LANGUAGE: Japanese; English

L199 ANSWER 47 OF 53 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 92022872 EMBASE
DOCUMENT NUMBER: 1992022872
TITLE: In vitro susceptibility vs. in vivo efficacy of various antimicrobial agents against the Bacteroides fragilis group.
AUTHOR: Brook I.
CORPORATE SOURCE: Armed Forces Radiobiology, Research Institute,Bethesda, MD 20889-5145, United States
SOURCE: Reviews of Infectious Diseases, (1991) 13/6 (1170-1180).
ISSN: 0162-0886 CODEN: RINDDG
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology
009 Surgery
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB In vitro susceptibility testing is only one step in the evaluation of the potential efficacy of antimicrobial agents against the Bacteroides fragilis group. An assessment of in vivo efficacy, with a consideration of the factors that can best be studied in an infected host, is also an integral part of this process. Abscess models in rodents have been used to correlate in vitro activity with in vivo efficacy against this group of microorganisms. For metronidazole, clindamycin, moxalactam, and cefoxitin, the correlation was strong; for chloramphenicol and carbenicillin, it was not. In vivo studies of mixed infection with the B. fragilis group and Escherichia coli showed that cefoxitin and imipenem were effective; in contrast, cefotetan was not effective against resistant strains. Only strains susceptible to ceftizoxime in the agar dilution test were also affected by this drug in vivo. The so-called inoculum effect noted with

ceftizoxime may explain this finding. In vivo elimination of encapsulated organisms of the B. fragilis group was found to be more difficult than elimination of unencapsulated isolates. The .beta.-lactamase produced by Bacteroides species can protect the enzyme-producing organism as well as its partners in mixed infections from the effects of .beta.-lactam antibiotics. These data illustrate the complexity and difficulties encountered when in vitro activity is correlated with in vivo efficacy.

L199 ANSWER 48 OF 53 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2001-244822 [25] WPIDS
DOC. NO. CPI: C2001-073493
TITLE: Detecting bacteria that cause flesh degradation in fish, for **testing** freshness, comprises using probes or primers based on the trimethylamine N-oxide reductase system.
DERWENT CLASS: B04 D16
INVENTOR(S): DOS SANTOS, J P; GIORDANO, G; MEJEAN, V; DOS SANTOS, J
PATENT ASSIGNEE(S): (CNRS) CNRS CENT NAT RECH SCI; (CNRS) CENT NAT RECH SCI
COUNTRY COUNT: 94
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001020030	A2	20010322	(200125)*	FR	87

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

FR 2798393	A1	20010316	(200125)
AU 2000076669	A	20010417	(200140)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001020030	A2	WO 2000-FR2578	20000915
FR 2798393	A1	FR 1999-11543	19990915
AU 2000076669	A	AU 2000-76669	20000915

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000076669	A Based on	WO 200120030

PRIORITY APPLN. INFO: FR 1999-11543 19990915
AB WO 200120030 A UPAB: 20010508
NOVELTY - Use of nucleotide sequences (I) that encode a bacterial protein (II) of the trimethylamine N-oxide reductase (TR) system, or its fragments or derivatives, for detecting, in a **susceptible** host, any **bacterium** (A) that is implicated in the degradation of the flesh of aquatic animals, is new.

DETAILED DESCRIPTION - Nucleotide sequences (I) that encode a bacterial protein (II) of the trimethylamine N-oxide reductase (TR) system, or its fragments or derivatives, are used for detecting, in a **susceptible** host, any **bacterium** (A) that is implicated in the degradation of the flesh of aquatic animals. A fragment of (I) is a probe or primer of about 15-25 nucleotides (nt) and a derivative is formed by addition, deletion and/or substitution of one or more nt, provided they can still hybridize to the sequence encoding (II).

INDEPENDENT CLAIMS are also included for the following:

(1) the 16 sequences: DDN1+, DDN5+, DDN2-, DDN3-, DDN4- DDN5-, BN1+, BN3+, BN6+, BN2-, BN4-, BN5-, BC1+, BC2+, BC2-, BC3-;

(2) compositions, especially pairs of primers, containing various combinations of the sequences of (1);

(3) detecting (A) by hybridization with (I);

(4) a kit for use in method (3);

(5) genes (sequences, given in the specification) encoding the TorA protein of Shewanella c, Photobacterium phosphoreum and Salmonella typhimurium, their derivatives and fragments; and

(6) polypeptides encoded by the sequences of (5).

5'-CGGvGAyTACTCbAChGGTGC-3' (DDN1+)
5'-ATyGATGCGATyCTCGAACC-3' (DDN5+)
5'-CGTAmwsGTCGAkATCGTTrCGCTC-3' (DDN2-)
5'-GACTCACAyAwyTGyGAGTG-3' (DDN3-)
5'-TGrCCdCGrkCGTTAAAGAC-3' (DDN4-)
5'-CCvGGTTCGAGrATCGCATC-3' (DDN5-)
5'-CbGAyATCsTrCTGCC-3' (BN1+)
5'-GGmGAyTAyTCbACmGGyGC-3' (BN3+)
5'-TwyGArCGyAACGAymTCGA-3' (BN6+)
5'-GGvyCrTACCAbsCvCCTTC-3' (BN2-)
5'-ATCArrCCnswvGGCGTCCC-3' (BN4-)
5'-GbCACrTCdGTyTGyGG-3' (BN5-)
5'-ACnCCnGArAArTTyGArGC-3' (BC1+)
5'-TGyAThGAyTGyCAyAArGG-3' (BC2+)
5'-CCyTTrTGrCArTCdATrCA-3' (BC2-)
5'-TTnGCrTCrAArTGnGC-3' (BC3-)

n = A, C, G or T;
y = C or T;
r = A or G;
h = A, C or T;
d = G, A or T;
m = A or C;
w = A or T;
b = G, T or C;
s = G or C;
v = G, A or C;
k = G or T

USE - The method is used to test for bacteria that degrade the flesh of aquatic animals and so tests the freshness of aquatic animals (for consumption), particularly fish (sole, cod, rock mullet etc.) or crustaceans.

ADVANTAGE - The method can detect all spoilage bacteria (even when not closely related phylogenetically) quickly and inexpensively, with high sensitivity and selectivity, i.e. during the early stages of deterioration, and can be applied to samples from different geographical locations. It is considerably more sensitive than the standard method based on measuring total volatile basic nitrogen.

Dwg.0/9

L199 ANSWER 49 OF 53 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-246760 [21] WPIDS
DOC. NO. CPI: C2000-074791
TITLE: Screening for antitumor and antimicrobial agents, by **testing** ability of compounds to inhibit choline kinase.
DERWENT CLASS: B04 D16
INVENTOR(S): LACAL SANJUAN, J C
PATENT ASSIGNEE(S): (CNSJ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF
COUNTRY COUNT: 86
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

WO 2000012755 A1 20000309 (200021)* ES 18
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9955188 A 20000321 (200031)
ES 2148092 A1 20001001 (200052)
ES 2148092 B1 20010416 (200132)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000012755	A1	WO 1999-ES275	19990823
AU 9955188	A	AU 1999-55188	19990823
ES 2148092	A1	ES 1998-1828	19980828
ES 2148092	B1	ES 1998-1828	19980828

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9955188	A	Based on	WO 200012755

PRIORITY APPLN. INFO: ES 1999-1878 19990815; ES 1998-1828 19980828

AB WO 200012755 A UPAB: 20000502
NOVELTY - Method for identifying new antitumor, antiviral, antiparasitic and antifungal agents (I) from ability of test compounds to inhibit choline kinase (CK).
ACTIVITY - Antitumor; antiviral; antifungal; antiparasitic.
MECHANISM OF ACTION - (I) inhibit CK and thus production of phosphorylcholine (Pch) which is involved in transduction of intracellular signaling in tumor proliferation and in infected cells.
USE - The method is used to identify potential antitumor, antiviral, antifungal and antiparasitic agents.
ADVANTAGE - The method allows high throughput screening of natural or synthetic compounds, and by using CK of various origins, very specific inhibitors may be identified.
Dwg.0/0

L199 ANSWER 50 OF 53 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-302669 [26] WPIDS
DOC. NO. CPI: C2000-091624
TITLE: **Detecting** homocysteine (hCys) in samples useful for diagnosing and monitoring pathological conditions by enzymatically converting hCys to methionine and producing tetrahydrofolate (THF), and measuring THF to quantify hCys levels.
DERWENT CLASS: B04 D16
INVENTOR(S): SCHIRCH, L
PATENT ASSIGNEE(S): (UYVI-N) UNIV VIRGINIA COMMONWEALTH
COUNTRY COUNT: 93
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6046017	A	20000404	(200026)*		15
WO 2000077244	A1	20001221	(200102)	EN	

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2000056029 A 20010102 (200121)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6046017	A	US 1999-332510	19990614
WO 2000077244	A1	WO 2000-US15896	20000612
AU 2000056029	A	AU 2000-56029	20000612

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000056029	A	Based on	WO 200077244

PRIORITY APPLN. INFO: US 1999-332510 19990614

AB US 6046017 A UPAB: 20000531

NOVELTY - Detecting homocysteine (hCys) in a sample solution comprises:

(a) enzymatically converting all hCys in a sample to methionine (Met) and producing a tetrahydrofolate (THF) byproduct, where the amount of THF produced during the enzymatic conversion corresponds directly with the quantity of hCys in the sample;

(b) determining an amount of the THF byproduct from (a) and using the amount to identify the level of hCys in the sample.

DETAILED DESCRIPTION - Methods for measuring hCys:

(1) either:

(a) combining the sample solution with 5-methyl tetrahydrofolate (5-CH3-THF) in the presence of methionine synthase;

(b) forming a THF reaction product from the combined mixture;

(c) reacting THF with tritiated glycine in the presence of water using serine hydroxymethyl transferase (SHMT) to form tritiated water and non-tritiated glycine; and

(d) quantifying the amount of tritiated water formed in (1c) and using the amount of tritiated water formed to identify a level of hCys in the sample solution;

(2) or:

(a) employing steps (a) and (b) of method (1);

(b) reacting THF with serine and oxidized **nicotinamide adenine dinucleotide phosphate** (**NADP**+) in the presence of SHMT, methylene **tetrahydrofolate dehydrogenase** (MTD), and formyl **tetrahydrofolate dehydrogenase** (FTD); and

(c) measuring reduced **nicotinamide adenine dinucleotide phosphate** (NADPH) produced in (2b) and using the amount of NADPH formed to identify a level of hCys in the sample solution.

INDEPENDENT CLAIMS are also included for the following:

(1) a kit for measuring hCys comprising a reaction vessel and quantities of 5-CH3-THF, methionine synthase, serine, **NADP**+, SHMT, MTD and FTD; and

(2) a kit for measuring hCys comprising a reaction vessel and quantities of 5-CH3-THF, methionine synthase, SHMT and tritiated glycine.

USE - The methods are useful for detecting and quantifying hCys in biological samples. Furthermore, the methods are useful for diagnosing and monitoring pathological or potentially pathological conditions, which are related to or manifested in the hCys content of body fluids or tissues. These may include atherosclerosis, blood diseases, vitamin deficiencies, or inborn errors of metabolism. The methods may also be used for the

evaluation of the effects of pharmaceuticals (e.g. anti-folate drugs), or in research settings for the investigation of any subject related to hCys (e.g. one-carbon metabolism or folate metabolism).

ADVANTAGE - Prior assays for hCys are time-consuming, expensive and have low levels of sensitivity. The present methods are both rapid, inexpensive assays for detecting and quantifying hCys to be used in clinical and research settings. In previous methods, 1000 assays would cost about 7000 dollars while the present methods would only cost about 500 dollars. Method (1) is about 500 dollars. Method (1) is about 3-orders of magnitude more sensitive than prior methods, and method (2) is 1 order of magnitude more sensitive. For both methods, the time for analysis is greatly reduced, i.e. 30 minutes or less (prior methods require nearly 1 hour for a single determination).

Dwg.0/9

L199 ANSWER 51 OF 53 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999-601770 [51] WPIDS
DOC. NO. CPI: C1999-175205
TITLE: Polymerase chain reaction **assays** for **detecting** Streptococcus pneumonia useful for the diagnosis of pneumococcal meningitis .
DERWENT CLASS: B04 D16
INVENTOR(S): DU PLESSIS, M; KLUGMAN, K P; SMITH, A M
PATENT ASSIGNEE(S): (MEDI-N) MEDICAL RES COUNCIL; (SAME-N) SOUTH AFRICAN INST MEDICAL RES; (UYWI-N) UNIV WITWATERSRAND
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
ZA 9807024	A	19990428	(199951)*		63

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
ZA 9807024	A	ZA 1998-7024	19980805

PRIORITY APPLN. INFO: ZA 1997-6886 19970801

AB ZA 9807024 A UPAB: 19991207

NOVELTY - A polymerase chain reaction (PCR) assay for detecting an antibiotic resistant strain of Streptococcus pneumoniae uses primers based on the penicillin binding protein 2B (pbp2B) gene.

DETAILED DESCRIPTION - A PCR assay for detecting an antibiotic resistant strain of Streptococcus pneumoniae in a sample includes:

(1) combining denatured DNA present in the sample with a first resistance primer comprising a nucleotide sequence which forms part of a sequence covering positions 678 to 845 of sequence (I) encoding the pbp2B **transpeptidase** coding region given in the specification, a complementary sequence or a sequence which will bind to it under strict hybridization conditions, providing that a first resistance primer comprising a sequence covering only positions 704 to 723 of (I) is excluded;

(2) amplifying corresponding sections of the penicillin binding protein 2B (pbp2B) gene of any S. pneumoniae organism present in the sample; and

(3) detecting PCR products.

INDEPENDENT CLAIMS are also included for:

(1) a PCR assay for detecting an antibiotic-resistant strain of S. pneumoniae in a sample including:

(a) combining a first resistance primer comprising a sequence which forms part of a sequence covering positions 2317 to 2679 of (II) encoding

the pbp1A **transpeptidase** encoding region, a complementary sequence or a sequence which will bind to it under strict hybridization conditions, and denatured DNA present in the sample;

(b) amplifying corresponding sections of the penicillin binding protein 1A (pbp1A) gene of any S. pneumoniae organism present in the sample; and

(c) detecting PCR products;

(2) a resistance primer comprising a nucleotide sequence which forms part of a sequence covering positions 678 to 845 of sequence (I) encoding the pbp2B **transpeptidase** coding region given in the specification;

(3) the resistance primer of (1);

(4) a species specific primer for use in a PCR assay for detecting a S. pneumoniae strain in a sample comprising a sequence which forms part of a conserved region of the **transpeptidase**-encoding region (TER) of the pbp 2B gene, a complementary sequence or a sequence which will bind to it under strict hybridization conditions;

(5) a species specific primer for use in a PCR assay for detecting a S. pneumoniae strain in a sample comprising a sequence which forms part of a conserved region of the TER of the pbp1A gene, a complementary sequence or a sequence which will bind to it under strict hybridization conditions; and

(6) a kit for use in a PCR assay comprising a first PCR tube containing a pair of species specific primers, a first resistance primer; and a DNA polymerase enzyme.

USE - The products and methods can be used for detecting S. pneumoniae , particularly antibiotic-resistant strains (claimed). They can be used for simultaneously diagnosing pneumococcal meningitis and identifying any antibiotic-resistant S. pneumoniae strains in a sample (claimed). The methods can be used for detecting S. pneumoniae strains resistant to antibiotics, e.g. beta -lactam antibiotics, preferably penicillin.

The assay and the kit can be adapted to detect other pathogens causing meningitis. The assay can be used to detect an antibiotic resistant strain of S. pneumoniae with a minimum inhibitory concentration (MIC) of 0.25-1 micro g/ml where the PCR products detected are a 1043 bp and a 224 bp product.

ADVANTAGE - The semi-nested PCR assay can be used for the simultaneous diagnosis of pneumococcal meningitis as well as the identification of penicillin-resistant isolates of S. pneumoniae in cerebrospinal fluid (CSF) specimens. The specificity and sensitivity for CSF specimens was found to be 100% and 94.7% respectively, which therefore makes the technique attractive as a diagnostic method. The predictive value of a positive result is 100% and the predictive value of a negative result is 99.6%. Using this PCR assay, a result can be achieved within a few hours. Unlike other methods, the CSF only has to be boiled and therefore laborious DNA extraction methods are eliminated. Since there is often insufficient specimen available for numerous laboratory tests, this method is convenient in that it only requires 15 mu l of CSF.

Dwg.0/6

L199 ANSWER 52 OF 53 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1988-127804 [19] WPIDS
DOC. NO. CPI: C1988-057139
TITLE: Reagent for **assay** of gamma-glutamyl-**transpeptidase** in blood etc. - comprises amino acid dehydrogenase and a substrate specific to the **transpeptidase** activity.
DERWENT CLASS: B04 D16 J04
INVENTOR(S): KONDO, H; MOTOYAMA, A; NAGATA, K; SHIRAISHI, T; TOMITA, K
PATENT ASSIGNEE(S): (NIRA) UNITIKA LTD
COUNTRY COUNT: 6
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 266905	A	19880511	(198819)*	EN	12
R: DE FR GB IT					
JP 63094998	A	19880426	(198822)		
EP 266905	B	19920415	(199216)		12
R: DE FR GB IT					
DE 3778297	G	19920521	(199222)		
US 5126245	A	19920630	(199229)		7
JP 2501801	B2	19960529	(199626)		6

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 266905	A	EP 1987-308826	19871006
JP 63094998	A	JP 1986-239648	19861007
EP 266905	B	EP 1987-308826	19871006
DE 3778297	G	DE 1987-3778297	19871006
		EP 1987-308826	19871006
US 5126245	A	US 1987-105773	19871007
JP 2501801	B2	JP 1986-239648	19861007

FILING DETAILS:

PATENT NO	KIND		PATENT NO
DE 3778297	G	Based on	EP 266905
JP 2501801	B2	Previous Publ.	JP 63094998

PRIORITY APPLN. INFO: JP 1986-239648 19861007

AB EP 266905 A UPAB: 19970502

Reagent for the assay of gamma-glutamyltranspeptidase (I) comprises an amino acid dehydrogenase (II) and a substrate (III) specific to (I) activity.

(II) is pref. leucine, alanine, glutamate, phenylalanine, glycine, valine or serine dehydrogenase. (III) is pref. gamma-glutamyl-L-leucine, -L-alanine, -L-glutamic acid, -L-phenylalanine, -L-glycine, -L-valine or -L-serine.

USE/ADVANTAGE - With the reagent (I) can be determined directly from the continuous course of the reaction simply and easily. The assay is performed on body fluids such as blood, and it is not influenced by the bilirabin, haemoglobin etc. present.

Dwg.0/4

L199 ANSWER 53 OF 53 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1985-227675 [37] WPIDS
DOC. NO. NON-CPI: N1985-170902
DOC. NO. CPI: C1985-099159
TITLE: Enzyme compsn. for **determining** methotrexate - comprises **di hydro folate reductase**, reduced nicotinamide adenine di nucleotide phosphate and buffer.
DERWENT CLASS: B04 D16 S03
PATENT ASSIGNEE(S): (IATR) IATRON LABORATORIES; (IATR) IATRON LAB
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 60149398	A	19850806	(198537)*		5
JP 05033996	B	19930520	(199323)		5

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 60149398	A	JP 1984-4856	19840117
JP 05033996	B	JP 1984-4856	19840117

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 05033996	B	Based on	JP 60149398

PRIORITY APPLN. INFO: JP 1984-4856 19840117

AB JP 60149398 A UPAB: 19930925

An enzyme compsn. for determining methotrexate (MT) comprises a buffer liq. of pH 8-10 contg. both **dihydrofolate reductase** (DHFR) and reduced **nicotinamide adenine dinucleotide phosphate** (NADPH). DHFR and NADPH used in the invention are those prepared by common methods. Buffer used is e.g. tris-buffer (pref) Good's buffer, etc.

USE/ADVANTAGE - As the deactivation of DHFR and the decrease of NADPH can be depressed around pH 8-9, the enzyme compsn. contg. DHFR and NADPH for the determination of MT can be stably stored, and the determination can be simply and accurately carried out MT is used in tumour chemotherapy. Compsn is used for body fluid analysis.

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